

**FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS**

**TIME AND DATE:** 11:00 a.m., Monday, December 11, 1989.

**PLACE:** Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, NW., Washington, DC 20551.

**STATUS:** Closed.

**MATTERS TO BE CONSIDERED:**

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

2. Any items carried forward from a previously announced meeting.

**CONTACT PERSON FOR MORE INFORMATION:**

Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204. You may call (202) 452-3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: December 1, 1989.

William W. Wiles,

Secretary of the Board.

[FR Doc. 89-28529 Filed 12-1-89 3:53 pm]

BILLING CODE 6210-01-M

**RESOLUTION TRUST CORPORATION****Notice of Agency Meeting**

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 2:23 p.m. on Wednesday, November 29, 1989, the Board of Directors of the Resolution Trust Corporation met in closed session to consider certain matters relating to the Corporation's corporate activities.

In calling the meeting, the Board determined, on motion of Director C. C. Hope, Jr. (Appointive), seconded by Director Robert L. Clarke (Comptroller of the Currency), concurred by Chairman L. William Seidman, (Director M. Danny Wall, Director of the Office of Thrift Supervision, was absent for the vote at the beginning of the meeting),

that Corporation business required its consideration of the matters on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting by authority of subsections (c)(2) and (c)(9)(b) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(2) and (c)(9)(b)).

The meeting was held in the Board Room of the FDIC Building located at 550-17th Street, NW., Washington, DC

Dated: November 30, 1989.

Resolution Trust Corporation.

John M. Buckley, Jr.,

Executive Secretary.

[FR Doc. 89-28427 Filed 11-30-89; 4:56 pm]

BILLING CODE 6714-01-M

**SECURITIES AND EXCHANGE COMMISSION****Agency Meeting**

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Public Law 94-409, that the Securities and Exchange Commission will hold the following meeting during the week of December 4, 1989.

A closed meeting will be held on Tuesday, December 5, 1989, at 3:30 p.m.

The Commissioners, Counsel to the Commissioners, the Secretary of the Commission, and recording secretaries will attend the closed meeting. Certain staff members who have an interest in the matters may also be present.

The General Counsel of the Commission, or his designee, has certified that, in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c) (4), (8), (9)(A) and (10) and 17 CFR 200.402(a) (4), (8), (9)(i) and (10), permit consideration of the scheduled matters at a closed meeting.

Commissioner Fleischman, as duty officer, voted to consider the items listed for the closed meeting in closed session.

The subject matter of the closed

meeting scheduled for Tuesday, December 5, 1989, at 3:30 p.m., will be:

Institution of injunctive actions.  
Settlement of injunctive actions.  
Settlement of administrative proceeding of an enforcement nature.

Institution of administrative proceedings of an enforcement nature.

Formal orders of investigation.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact: Amy Kroll at (202) 272-2200.

Dated: November 30, 1989.

Jonathan G. Katz,

Secretary.

[FR Doc. 89-28493 Filed 12-1-89; 2:07 pm]

BILLING CODE 8010-01-M

**THE UNITED STATES INSTITUTE OF PEACE**

**DATE:** Thursday, December 7, 1989.

**TIME:** 9:00 a.m. to 5:30 p.m.

**PLACE:** The United States Institute of Peace, 1550 M Street, N.W. ground floor (conference room).

**STATUS:** Open session.—Thursday 9:15 a.m. to 5:30 p.m. (portions may be closed pursuant to subsection (c) of section 552(b) of title 5, United States Code, as provided in subsection 1706(h)(3) of the United States Institute of Peace Act, Pub. L. (98-525).

**AGENDA: (Tentative):**

Meeting of the Board of Directors convened. Chairman's Report. President's Report. Committee Reports. Consideration of the Minutes of the Thirty-sixth meeting of the Board. Consideration of grant application matters.

**CONTACT:** Ms. Olympia Diniak.  
Telephone (202) 457-1700.

Dated: November 29, 1989.

Bernice J. Carney,

Administrative Officer, The United States Institute of Peace.

[FR Doc. 89-28479 Filed 12-1-89; 2:05 pm]

BILLING CODE 3155-01-M



# Corrections

Federal Register

Vol. 54, No. 231

Tuesday, December 5, 1989

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

## DEPARTMENT OF AGRICULTURE

### Farmers Home Administration

#### 7 CFR Parts 1900 and 1957

#### Sale of Section 502 Rural Housing Loans

##### Correction

In rule document 89-26961 beginning on page 47957 in the issue of Monday, November 20, 1989, make the following correction:

On page 47958, in the first column, in the fifth line, "Part 157" should read "Part 1957".

BILLING CODE 1505-01-D

## DEPARTMENT OF COMMERCE

### International Trade Administration

#### Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Opportunity to Request Administrative Review

##### Correction

In notice document 89-21208 appearing on page 37496 in the issue of Monday, September 11, 1989, make the following correction:

On page 37496, in the table under "Countervailing Duty Proceedings", in the entry "Argentina: \* \* \*", in the second column, "07/14/88-12/31/89" should read "07/14/88-12/31/88".

BILLING CODE 1505-01-D

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 611

[Docket No. 91158-9258]

#### Foreign Fishing

##### Correction

In rule document 89-26956 beginning on page 47680 in the issue of Thursday, November 16, 1989, make the following corrections:

##### Appendix A to Subpart A [Corrected]

1. On page 47681, in Table 1., in the first column, in the eighth line, "Northeast" should read "Northwest".

2. On page 47682, in the first column, in the file line, the filing date should read "11-15-89".

BILLING CODE 1505-01-D

## ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 300

[Docket No. 121RA-LDR; FRL-3625-9]

#### National Oil and Hazardous Substance Pollution Contingency Plan: Applicability of RCRA Land Disposal Restrictions to CERCLA Response Actions

##### Correction

Document 89-23721, beginning on page 41566 in the issue of Tuesday, October 10, 1989, was published in the "Notices" section of the issue. It should have appeared in the "Proposed Rules" section.

BILLING CODE 1505-01-D

## ENVIRONMENTAL PROTECTION AGENCY

[OPP-30302; FRL 3664-4]

#### Certain Companies; Applications to Register Pesticide Products

##### Correction

In notice document 89-27214 beginning on page 48313 in the issue of Wednesday, November 22, 1989, make the following corrections:

On page 48314, in the first column, in the third item under "SUPPLEMENTARY INFORMATION", in the ninth line, remove

the "1" after "aminocarbonyl" and, in the 10th line, the second "N" should be followed by a hyphen.

BILLING CODE 1505-01-D

## ENVIRONMENTAL PROTECTION AGENCY

[OPP-00279; FRL-3630-6]

#### Nominations to the Scientific Advisory Panel; Request for Comments

##### Correction

In notice document 89-19247 beginning on page 33767 in the issue of Wednesday, August 16, 1989, make the following corrections:

1. On page 33767, in the first column, under **SUMMARY**, in the first line, "provide" was misspelled.

2. On the same page, in the second column, "FOR FURTHER INFORMATION" should read "FOR FURTHER INFORMATION CONTACT".

3. On page 33768, in the third column, in the first complete paragraph, in the 10th line, "diplomate" was misspelled.

4. On page 33769, in the first column, in the 29th line, "NIEHAS" should read "NIEHS".

5. On the same page, in the second column, in the first complete paragraph, in the ninth line, "pharmacology" should read "pharmacology".

6. On page 33770, in the first column, in the first complete paragraph, in the third line, "an" should read "and". In the 16th line, "1968" should read "1969".

7. On the same page, in the second column, in the fifth line, "Southampton College" was misspelled, in the ninth line, "Signa" should read "Sigma", and in the 13th line, "chemicals" was misspelled.

8. On the same page, in the same column, in the third line of the final paragraph, "Laboratory" was misspelled.

9. On the same page, in the third column, in the first complete paragraph, in the sixth line from the end, "Diseases" should read "Disease".

10. On page 33771, in the first column, in the sixth line, the second "on" should read "in".

BILLING CODE 1505-01-D



**DEPARTMENT OF HEALTH AND HUMAN SERVICES****Food and Drug Administration****[Docket No. 89F-0451]****ICI Americas, Inc.; Filing of Food Additive Petition***Correction*

In notice document 89-26989 appearing on page 47828 in the issue of Friday, November 17, 1989, make the following correction:

In the third column, under **SUPPLEMENTARY INFORMATION**, in the seventh line, "19877" should read "19897".

BILLING CODE 1505-01-D

**DEPARTMENT OF HEALTH AND HUMAN SERVICES****Food and Drug Administration****[Docket No. 89P-0225]****Ice Cream Deviating From the Standard of Identity; Temporary Permit for Market Testing***Correction*

In notice document 89-27056 appearing on page 47829 in the issue of Friday, November 17, 1989, make the following correction:

In the third column, in the first complete paragraph, in the seventh line, insert "February 15, 1990" following "than".

BILLING CODE 1505-01-D

**DEPARTMENT OF THE INTERIOR****Minerals Management Service****Assessments for Incorrect or Late Reports and Failure to Report**

November 1, 1989.

*Correction*

In notice document 89-27051 appearing on page 47838 in the issue of Friday, November 17, 1989, make the following correction:

In the 2nd column, in the 1st complete paragraph, in the 9th through the 15th lines, "'nonrespondent exceptions' will be \$10 per month under AFS. The rates

were established by MMS for PAAS on non-respondent reports will be \$3 per month. The rate established by MMS for 'nonrespondent exceptions' will per month under AFS. The rates were" should read "'nonrespondent exceptions.' Based on actual costs incurred, the rate established by MMS for PAAS on non-respondent reports will be \$3 per month. The rate established by MMS for 'nonrespondent exceptions' will be \$10 per month under AFS. The rates were".

BILLING CODE 1505-01-D

**OFFICE OF PERSONNEL MANAGEMENT****5 CFR Parts 430, 432 and 540****Performance Management and Recognition System***Correction*

In rule document 89-27878 beginning on page 49075 in the issue of Wednesday, November 29, 1989, make the following corrections:

1. On page 49076, in the third column, in the last line of the first incomplete paragraph "acceptable" should read "unacceptable".

2. On page 49077, in the first column, section number "\$ 431.107" should read "\$ 432.107".

**\$ 432.107 [Corrected]**

3. On the same page, in the third column, in \$ 432.107(b), in the eighteenth line insert "ending" between "period" and "on".

BILLING CODE 1505-01-D

**SECURITIES AND EXCHANGE COMMISSION****17 CFR Part 200**

[Release Nos. 33-6846; 34-27281; 35-24954; 39-2227; IC-17146 IA-1205]

**Organization, Functions and Authority Delegations***Correction*

In rule document 89-23303 beginning on page 40862 in the issue of Wednesday, October 4, 1989, make the following correction:

**\$ 200.303 [Corrected]**

On page 40862, in the 3rd column, in \$ 200.303(a)(2), in the 11th line, "e.s.t." should read "c.s.t.".

BILLING CODE 1505-01-D

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 71****[Airspace Docket No. 89-AWA-5]****Establishment of the Memphis Terminal Control Area and Revocation of the Memphis International Airport, Airport Radar Service Area; TN***Correction*

In rule document 89-25785 beginning on page 46226 in the issue of Thursday, November 2, 1989 make the following correction:

**\$ 71.403 [Correctly designated]**

On page 46227, in the first column, the section number "\$ 71.501" should read "\$ 71.403".

BILLING CODE 1505-01-D

**DEPARTMENT OF THE TREASURY****Customs Service****19 CFR Part 122****[T.D. 89-96]****Implementation of the Air Carrier Smuggling Prevention Program***Correction*

In rule document 89-27025 beginning on page 47761 in the issue of Friday, November 17, 1989, make the following correction:

On page 47763, in the first column, in amendatory instruction 2, in the third line, "171.176" should read "122.176".

BILLING CODE 1505-01-D

DEPARTMENT OF HEALTH AND

WELFARE

OFFICE OF THE SECRETARY

WASHINGTON, D. C.

1918

1919

1920

1921

1922

1923

1924

1925

1926

1927

1928

1929

1930

1931

1932

1933

1934

1935

1936

1937

1938

1939

1940

1941

1942

1943

1944

1945

1946

1947

1948

1949

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

1971

1972

1973

1974



# Registered Federal Reporter

---

Tuesday  
December 5, 1989

---

## Part II

### Department of the Interior

---

#### Bureau of Indian Affairs

---

Fiscal Year 1990 Indian Child Welfare  
Act Grant Program; Availability of Title II  
Funds; Notice



**DEPARTMENT OF THE INTERIOR****Bureau of Indian Affairs****Fiscal Year 1990 Indian Child Welfare Act Grant Program; Availability of Title II Funds**

November 28, 1989.

**AGENCY:** Bureau of Indian Affairs, Interior.**ACTION:** Notice of availability of title II funds.

**SUMMARY:** The Indian Child Welfare Act makes available grant funds from the Bureau of Indian Affairs (BIA), Department of the Interior, for the purpose of improving child welfare services to Indian children and families.

**EFFECTIVE DATE:** The closing date for receipt of applications for this program is February 16, 1990.

**ADDRESSES:** Bureau of Indian Affairs' area offices are listed in Part IV of this announcement. BIA/Division of Social Services, Room 310 SIB, 18th and C Streets NW., Washington, DC, 20240.

**FOR FURTHER INFORMATION CONTACT:** The Bureau of Indian Affairs' area office nearest to the applicant, or the Acting Chief, Division of Social Services at the address listed above; Telephone (202) 343-6434.

**SUPPLEMENTARY INFORMATION:** The Assistant Secretary—Indian Affairs is announcing procedures necessary to apply for grant funds under title II of the Indian Child Welfare Act.

Applications for single-year programs as well as renewal applications for existing multi-year projects will be accepted. The available funding for all applications is \$8.4 million. This includes approximately \$2.0 million for new single-year applications. It is important that applicants carefully review requirements detailed in this announcement related to deadlines, indirect cost, and page limitations. If an application is not received by the close of business on February 16, 1990, the application will not be reviewed. If the applicant does not itemize indirect costs in its proposed budget a total of five points will automatically be deducted from Criteria V—"Fiscal Capabilities, Budget and Budget Justification, part (b)." If an application is longer than the established page limitation, only the first forty pages of the application will be reviewed.

**Authority:** The Indian Child Welfare Act, Public Law 95-608 authorized the utilization of funds for grants to Indian tribes, organizations, and multi-service Indian centers. This notice is published in exercise of authority delegated by the Secretary of the

Interior to the Assistant Secretary—Indian Affairs by 209 DM 8.

**Part I. General Information****A. Background**

This announcement provides information on opportunities to apply for Indian Child Welfare Act (ICWA) grant funds for FY 1990. The Indian Child Welfare Act of 1978 (Pub. L. 95-608, 25 U.S.C. 1902, 25 U.S.C. 1931 and 1932) limits the use of grant funds for the following activities:

- (1) To prevent separation of Indian children from their families when possible;
- (2) When separation is necessary, to reunite Indian children with their families as soon as possible;
- (3) When reunification is not possible, to arrange permanent placements with extended families or through adoption; and
- (4) To carry out work with Indian children and their families in accordance with the preferences of the ICWA, following procedures and practices which reflect the unique values of Indian culture.

An applicant for an Indian Child Welfare Act Grant may submit only one grant application for this program during this application period (refer to 25 CFR 23.21(b)).

**B. BIA Indian Child Welfare Act Grant Program Purpose**

The purposes of the Bureau of Indian Affairs' Indian Child Welfare grants as specifically stated in the law are:

- (1) The establishment and operation of Indian child and family service programs which promote the stability of Indian families, and
- (2) The provision of non-Federal matching shares for the other Federal financial assistance programs which contribute to the same purpose.

These purposes are further defined in Public Law 95-608, sections 201 and 202; 25 U.S.C. 1931 and 1932; and 25 CFR 23.22.

The objective of every Indian child and family service program shall be to prevent the breakup of Indian families, and insure that the permanent removal of an Indian child from the custody of his/her parent or Indian custodian shall be a last resort.

**C. Eligible Applicants**

The governing body of any tribe or tribes, or any nonprofit off-reservation Indian organization or multi-service Indian center, may apply individually or as a consortium for a grant. No applicant may submit more than one application.

A consortium is created by an agreement or association between two or more eligible applicants.

New applications for projects of one year duration, as well as renewal applications for multi-year applications originally funded in FY 1989 may be submitted in response to this announcement.

**Part II. Available Funds**

The appropriation for this program in Fiscal Year 1990 is \$8.4 million. This includes funding for existing multi-year programs. Approximately \$2.0 million dollars will be available for single year grant applications nationwide this funding period. Grants will be awarded to individual tribes, organizations, or to consortia of tribes and organizations within the following categories:

- (a) A maximum of up to \$50,000 for eligible applicants with a total service area population of 2,500 or less;
- (b) A maximum of up to \$75,000 for eligible applicants with a total service area population greater than 2,500 but less than 5,000;
- (c) A maximum of up to \$100,000 for eligible applicants with a total service area population greater than 5,000 but less than 7,500;
- (d) A maximum of up to \$150,000 for eligible applicants with a total service area population of 7,500 but less than 15,000;
- (e) A maximum of up to \$300,000 for eligible applicants with a total service area of greater than 15,000.

Applicants in the State of Alaska will be allowed a 25 percent cost of living adjustment to the total maximum amount for which they may apply.

Notwithstanding the above grant guidelines, consortia having a total service area population of 5,000 or less, may apply for a maximum grant of up to \$100,000 because of the greater administrative costs associated with operating a small consortium. Consortia with service area populations greater than 5,000 must comply with the grant guidelines set above.

Service area population means the total number of Indians eligible for service under 25 CFR 23.2 (d)(2) and/or (3), in the geographical area to which the tribe, or organization, or multi-service center can realistically provide the services proposed in the application. The service area population is used only to determine maximum grant allocations that a tribe, multi-service center, or organization may be eligible to receive. These population figures must be based on identifiable statistical resources.

All costs associated with the administration of proposed projects



shall be line itemized. Indirect cost as well as all other administrative costs must be broken down by percentage and dollar amounts. All administrative costs will be carefully scrutinized in relation to proposed funds used for direct services. If the applicant does not itemize indirect costs in its proposed budget, a total of five points will automatically be deducted from Criteria V—"Fiscal Capabilities, Budget and Budget Justification, Part (b)."

In accordance with 25 CFR 23.25(a)(8), the reasonableness and relevance of the estimated costs for the project are considered in the rating of all project applications. Administrative costs are only allowable within the funding specified by the grant formula and limitations specified in this announcement.

Applicants will not be funded for more than their demonstrated need, as specifically addressed in 25 CFR 23.24 and 23.25. The statistical requirements established in these regulations, as well as the tribe's multi-service center's or organization's prior service record will be used in determining need. Examples of necessary data include the number of actual or estimated Indian family breakups, and the number of persons who will receive direct services from any portion of the proposed program, by program area.

In accordance with 25 CFR 23.27(c)(3), if an applicant has been a grantee during the preceding fiscal year and proposes to continue essentially the same service program, the applicant, at the time of application, must provide a satisfactory evaluation from the area office along with the other materials required in this subsection.

A satisfactory evaluation means at a minimum, the timely submission of all fiscal and programmatic reports, including utilization of the corrective analysis form when programmatic changes are necessary. At no time may any Indian tribe, organization, or multi-service center which is either an eligible individual applicant in accordance with 25 CFR 23.21 or a member of a consortium, receive Indian Child Welfare Act grant funds greater than a maximum grant of \$300,000 through a direct grant or through subgranting procedures with approved applicants.

### Part III. Application and Selection Criteria

#### A. Statutory Authority

The Indian Child Welfare Program from the Bureau of Indian Affairs is authorized by Title II of Public Law 95-608, the Indian Child Welfare Act (25 U.S.C. 1901 *et seq.*, 25 CFR part 23). The

appropriation for the grant program is \$8.4 million. The Central Office will retain 10 percent of the total available funding, to assure funding for any applicant who may appeal a denial at the area office level. If these funds are not utilized for appeals, they will be distributed through the area offices to approved applicants.

#### B. The Closing Date for Receipt of Applications

The closing date for receipt of all applications under this Program Announcement is February 16, 1990. Applications for Indian Child Welfare Act Grants must be received in the appropriate Bureau of Indian Affairs' Social Services Area/Agency Office, as specified in 25 CFR 23.28, on or before 4:15 p.m. or the applicable close of business for that office on the closing date of the application period. Post marks will not be considered as meeting the timeframe for applications received after the application deadline. The names and addresses of Bureau Social Service Area Offices and staff are listed at the end of this announcement. Hand delivered applications are accepted during normal working hours Monday through Friday. Applications which do not meet this criteria are considered late applications and will not be considered in the current competition.

#### C. Program Priorities

Indian Child Welfare Act grants are for the purpose of:

(1) Establishment and operation of Indian child and family service programs. In accordance with the policy in 25 CFR 23.3 to emphasize the design and funding of programs to promote the stability of Indian families, program priorities have been established to be utilized by area offices in the competitive review process when more than one application obtains the same competitive score. These priorities reemphasize the programmatic interest in maintaining the family and preventing out-of-home placements. Program priorities are listed below in descending order:

- (a) Operation and maintenance of facilities for the counseling and treatment of Indian families and for the temporary custody of Indian children.
- (b) Family Assistance (including homemaker and home counselors), daycare, after-school care, recreational activities, respite-care, and employment.
- (c) A system for the tribes and Indian organizations to license or otherwise regulate Indian foster and adoptive homes or the preparation and implementation of child welfare codes within their legal jurisdictional

authority, or pursuant to a state-tribal and/or Indian organization agreement.

(d) Guidance, legal representation and advice to Indian families involved in tribal, state or federal child custody proceedings.

(e) Employment of professional and other trained personnel to assist the tribal court in the disposition of domestic relations and child welfare matters. (Funding of tribal court staff is not allowable.)

(f) Education and training of Indians (including tribal court judges and staff) in skills relating to child and family assistance and service programs.

(g) Subsidy programs under which Indian adoptive children may be provided support comparable to that for which they could be eligible as foster children, taking into account the appropriate state standards of support for maintenance and medical needs.

(h) Home improvement programs.

(i) Other programs designed to meet the purpose of the Act. Planning or feasibility grants may be undertaken for any one of the above listed program purposes. These applications will be ranked according to the priority of the program under consideration.

(2) Providing non-Federal matching shares for other Federal financial assistance programs as prescribed in 25 CFR 23.43. The order of priorities of matching share grants will correlate with the purpose of the program receiving the match.

#### D. Content of the Application

The application shall be no longer than 40 pages, double spaced, excluding the appendix. The table of contents and appendices will not be counted toward the maximum length. It is recommended that the appendix be no longer than 20 pages. Any application whose narrative exceeds 40 pages will not be reviewed past page 40.

The application shall include standard form 424 and the following information:

- (1) Name and address of Indian tribal governing body(ies) or Indian organization applying for a grant.
- (2) Descriptive name of project.
- (3) Grant funds requested.
- (4) The unduplicated client service population directly benefiting from the project.
- (5) Length of project.
- (6) Beginning date.
- (7) Project budget categories or items.
- (8) Program narrative statement (including three year plans if current multi-year grantee).
- (9) Certification or evidence of request by Indian tribe or board of Indian



organization (preferably covering the duration of the proposed project),

(10) Evidence of substantial community support for the proposed program. This request may be in the form of a tribal resolution, an endorsement included in the grant application or such other forms as the tribal constitution or current practice requires,

(11) Name and address of the Bureau office to which an application is submitted,

(12) Date application is submitted to the Bureau, and

(13) Additional information pertaining to grant applications for funds to be used as matching shares.

Information included in the appendix should related specifically to the application. The appendix may include, but is not limited to the following: Resolutions, support letters, position descriptions, fiscal management/accounting certification, operational monitoring system, non-profit status documentation.

#### E. Evaluation Criteria

The content of the application and the following factors are considered in the competitive review of these grant applications:

(1) The degree to which an applicant demonstrates in the program narrative an understanding of the social service problems or issues impacting the client population which the applicant proposes to serve. (If an applicant identifies alcohol or drug abuse as a major problem or issue impacting Indian children and families, they must also clearly address current efforts to coordinate existing resources to attack these problems. This may include information on the development or contents of the Tribal Action Plan specified under section 4206 of the Omnibus Drug and Alcohol Abuse Act of 1986.)

(2) The degree to which and the methods by which the applicant intends to fulfill the purpose of the grant, specifically relating to the goals and objectives of the program to the issues and problems impacting the client population. (The proposed methods outlined in the application should have an established basis for operation, e.g., a tribal placement program requires tribally established licensing or placement standards on which to operate, or a program to assist the tribal court requires a tribal code and a tribe court with which to work, etc.)

(3) Whether the applicant presents narrative, quantitative data and demographics of the client population to

be served. Examples of such data include:

(a) The number of actual or estimated Indian child placements outside the home;

(b) The number of actual or estimated Indian family breakups; and

(c) The need for a directly related preventive program. (Refer to part II for further explanation.)

(4) The relative accessibility which the Indian population to be served under a specific proposal already has to existing child and family service programs emphasizing prevention of Indian family breakup. Factors to be considered in determining accessibility include:

(a) Cultural barriers;

(b) Discrimination against Indians;

(c) Inability of potential Indian clientele to pay for service;

(d) Lack of programs which provide free service to indigent families;

(e) Technical barriers created by existing public or private programs;

(f) Availability of transportation to existing programs;

(g) Distance between the Indian community to be served under the proposal and nearest existing programs;

(h) Quality of service provided to Indian clientele; and

(i) Relevance of service provided to specific needs of Indian clientele.

(5) The proper justification of the extent to which the proposed program would duplicate any existing child and family service program emphasizing prevention of family breakup, taking into consideration all the factors listed in paragraphs (1), (2), (3), and (4) of this section. Proper justification must be given for any duplication of services.

(6) Evidence of substantial community support for the proposed program from the Indian community or communities to be served. Such support may be evidenced by:

(a) Letters of support from individuals and families to be served;

(b) Local Indian community representation in and control over the Indian entity requesting the grant;

(c) Letters from local social service or social service related agencies familiar with the applicant's past work experience;

(7) The explanation of proposed facilities and of the structure of the tribal or Indian organization requesting grant funds, and the position description of any position to be funded with grant funds, identifying qualifications, responsibilities, and lines of supervision.

(8) The reasonableness and relevance of the estimated costs of the proposed program or service.

An application shall not receive a preliminary approval unless a review of the application determines that it:

(a) Contains all the information required in "D. Content of an Application".

(b) Receives a minimum score of 85 in a competitive review under the scoring process using the selection criteria established in regulation.

(c) If an applicant has been a grantee during the year immediately preceding the year for which an application is being made, and has made an application to continue essentially the same service program, satisfactory evaluation(s) from the area office review of the program must be provided in addition to the other materials required in this subsection.

#### F. Single Year Grant Review Process

The Assistant Secretary—Indian Affairs or his/her designated representative shall select for grants under the Indian Child Welfare Act those proposals which will in his/her judgment best promote the purposes of the Act. Such selection will be made through a review process in which each application will be scored competitively using the BIA review criteria listed above at the appropriate Bureau Social Service Office referred to in 25 CFR 23.30, 23.31, or 23.33. Grant applications will be reviewed by a panel of reviewers qualified by training and/or experience in human services to Indian populations. These recommendations will be used by the Assistant Secretary—Indian Affairs' designated representative to preliminary approve or disapprove all single year grant applications, and make funding recommendations to the Central Office. The Assistant Secretary—Indian Affairs has final funding authority.

#### G. Procedures for Submission of Multi-Year Renewal Applications

The Assistant Secretary—Indian Affairs may award grants for the second year of approved multi-year project proposals as authorized in 25 CFR 23.37. *No new multi-year projects shall be considered in the FY 1990 application period.* Funding of projects is subject to the availability of funds in accordance with 25 CFR 23.27(e). Only current grantees who have FY 1989 approved multi-year projects may submit renewal applications.

Current multi-year projects grantees must submit three copies of renewal applications which contain the following information to the appropriate agency or area office:

(1) New SF-424;



- (2) Updated information required in 25 CFR 23.24, 23.25, 23.26 and 23.27(c)(3);  
 (3) Updated Operational Monitoring System (OMS);  
 (4) Proposed budget.

Grantees must have a satisfactory evaluation of the current year of their multi-year project from the Area Office in order to be considered for funding for subsequent project years (25 CFR 23.27(c)(3)).

As stated in 25 CFR 23.37(e), requests (e.g., resolutions) from tribal governing bodies or Indian organizations which cover the duration of the multi-year project will fulfill the requirements specified in 25 CFR 23.26 and do not need to be resubmitted on an annual basis. Resolutions that covered only one year of the project must be updated for the year which the grantee is submitting a renewal application.

Grantees must comply with 25 CFR part 276 in terms of both financial and performance reporting requirements. Failure to meet and comply with regulatory requirements may result in suspension, cancellation and/or termination of program funds. The OMS for a multi-year renewal application must demonstrate a developmental approach to the delivery of the proposed child and family service project (25 CFR 23.37(d)(2)). In revising or updating the OMS, renewal applicants shall submit an OMS-2. Applicants may specify that the OMS-2 does not require updating and should note such in the renewal application.

#### H. Renewal Application Review

Upon submission of the initial application and the renewal application, the area/agency certification form will be completed by the appropriate area/agency office specified in 25 CFR 23.30 or 23.31. The applicant must include a satisfactory evaluation of their existing ICWA program (25 CFR 23.27(c)(3)) to include with their renewal application.

Materials submitted for renewal shall not be subject to competitive review. The area social worker or designated social services staff shall review renewal applications for compliance with 25 CFR part 23 and 25 CFR part 276. The area social worker or designated social services staff shall make recommendations based on this review.

#### I. Renewal Application Funding

Funding shall be in accordance with the formula published in the *Federal Register* (25 CFR 23.27(e)(1)). Funding after the first year of a multi-year project will depend upon the grantee's progress in achieving the objectives of the project according to the approved work plan submitted in the previous year(s) of the project (25 CFR 23.37(f)), demonstrated need, and the availability of funds.

#### J. Appeals

In accordance with 25 CFR 2.20(c), 23.63, and 23.64, the Assistant Secretary—Indian Affairs has made a determination to assume administrative jurisdiction over all Fiscal Year 1990 Indian Child Welfare Act Grant Application appeals.

Notice(s) of appeals must be filed within 30 days of the appellant's receipt of the decision being appealed. The notice is filed in the office of the official whose decision is being appealed. The date of filing is the date the notice of appeal is postmarked or the date it is personally delivered to the official's immediate office. (25 CFR 2.9(a), 2.13(a).) No extension of time will be granted for filing a notice of appeal. (25 CFR 2.9(a), 2.16.)

The Statement of Reasons must be filed within the next 30 days in the office of the official whose decision is being appealed. It may be included in or filed with the notice of appeal. (25 CFR 2.10.) The Assistant Secretary—Indian Affairs shall take action and render a decision

in accordance with the provisions required in 25 CFR 2.20.

#### Part IV. BIA Area Offices—Area Social Workers

**Aberdeen**—Dean Krahulec, 115 4th Avenue SE., Aberdeen, SD 57401; (605) 226-7351

**Albuquerque**—Joe Naranjo, 615 1st Street, P.O. Box 26567, Albuquerque, NM 87125-6567; (505) 766-3321

**Anadarko**—Jerry Bridges, P.O. Box 368, Anadarko, OK 73005; (405) 247-6673 ext. 257

**Billings**—Louise Reyes, 316 N. 26th Street, Billings, MT 59101; (406) 657-6651

**Eastern**—Evelyn Roanhorse, 18th and C Streets NW., Code 1000, Washington, DC 20240; (703) 235-3179

**Juneau**—Jimmie Clemmons, P.O. Box 3-8000, Juneau, AK 99802-1219; (907) 586-7611

**Minneapolis**—Rosalie V. Clark, 15 South Fifth Street, 10th Floor, Minneapolis, MN 55402; (612) 349-3615

**Muskogee**—Alice Allen, Old Federal Building, Muskogee, OK 74401; (918) 687-2507

**Navajo**—Nancy Evans, P.O. Box M, Window Rock, AZ 86515; (602) 871-5151

**Phoenix**—Elizabeth Black Owl, One North First Street, P.O. Box 10, Phoenix, AZ 85004; (602) 241-2262

**Portland**—Area Social Worker, 1002 NE Holladay, P.O. Box 3785, Portland, OR 97232; (503) 231-6783/6785

**Sacramento**—Kevin Sanders, Federal Office Building, 2800 Cottage Way, Sacramento, CA 95825; (916) 978-4691.

**Eddie F. Brown,**

*Assistant Secretary—Indian Affairs.*

[FR Doc. 89-28313 Filed 12-4-89; 8:45 am]

BILLING CODE 4310-02-M







# Estimate Part Federal Register

---

Tuesday  
December 5, 1989

---

## Part III

### Department of Transportation

---

#### Coast Guard

---

#### Approval of Inflatable Lifejackets; Interim Final Rule



## DEPARTMENT OF TRANSPORTATION

## Coast Guard

## 46 CFR Part 160

[CGD 78-174b]

RIN 2115-AC16

## Approval of Inflatable Lifejackets

AGENCY: Coast Guard, DOT.

ACTION: Interim Final Rule.

**SUMMARY:** This interim final rule establishes structural and performance standards and procedures for approval of inflatable lifejackets, as well as requirements for associated manuals, servicing programs, and shore-side service facilities. Inflatable lifejackets need only minimal stowage space and are well suited for use on vessels that have stowage space and weight limitations. Inflatable lifejackets are allowed only on certain inspected vessels and submersibles and must be serviced annually at approved servicing facilities. Their use is optional but, if carried, certain limitations apply.

**DATES:** *Effective date:* This rule becomes effective on January 4, 1990.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 4, 1990. *Comment Date:* Comments must be received by January 19, 1990.

**ADDRESSES:** Comments may be mailed to the Executive Secretary, Marine Safety Council (G-LRA-2/3600) (CGD 78-174b), U.S. Coast Guard Headquarters, 2100 Second St., SW., Washington, DC 20593-0001. Comments will be available for examination and copying at, and may be delivered to, Room 3600 at the above address, between the hours of 8 a.m. and 3 p.m. Monday through Friday, except holidays. The telephone number is (202) 267-1477.

A final regulatory evaluation has been included in the public docket for this rulemaking. The regulatory evaluation and other materials referenced in this document may be inspected and copied at the Marine Safety Council, between the hours of 8 a.m. and 3 p.m. Monday through Friday, except holidays, at the above address.

**FOR FURTHER INFORMATION CONTACT:** Mr. Samuel Wehr, Office of Marine Safety, Security, and Environmental Protection, Attn: G-MVI-3/14, 2100 Second St., SW., Washington, DC 20593-0001, (202) 267-1444.

**SUPPLEMENTARY INFORMATION:**

*Notice of Proposed Rulemaking.* A Notice of Proposed Rulemaking (NPRM)

was published in the Federal Register on May 29, 1985 (50 FR 21862 and 21878). Corrections to this NPRM were published in the Federal Register of June 18, 1985 (50 FR 25274). The comment period on the proposal ended on July 15, 1985. Comments were received from a total of 19 parties.

*Hybrid Personal Flotation Devices (PFD's).* The NPRM proposed requirements for both hybrid PFD's and inflatable lifejackets. An interim final rule promulgating hybrid PFD requirements was published in the Federal Register on August 22, 1985 (50 FR 33923). Corrections to this rule were published on February 4, 1986 (51 FR 4349). Comments that addressed concerns relating to the hybrid requirements were analyzed and discussed in that publication. Some of those comments are also relevant to inflatable lifejackets and are addressed in the discussion of comments in this rulemaking.

*Carriage Requirements for Inflatable Lifejackets.* Provisions relating to carriage of inflatable lifejackets as substitutes for other required lifejackets on board various types of vessels will be included in regulations being proposed under a project to update the lifesaving appliances and arrangements for all vessels to implement the 1983 Amendments to SOLAS 1974 (SOLAS 74/83) (Docket CGD 84-069) (new Subchapter W). Advance notice of this related rulemaking was published in the Federal Register of April 29, 1985 (50 FR 17530). A Notice of Proposed Rulemaking was published April 21, 1989 (54 FR 16198). Until the rulemaking is completed, inflatable lifejackets may be accepted for carriage under the equivalency provisions in the various vessel regulations by contacting the Commandant (G-MVI) according to 46 CFR 30.15, 46 CFR 70.15, 46 CFR 90.15, 46 CFR 108.105, 46 CFR 167.35-1, 46 CFR 169.109, and 46 CFR 175.15. The Coast Guard expects to follow the guidelines in the inflatable PFD NPRM published on May 29, 1985 when granting an acceptance.

*Request for public hearing.* Two requests for a public hearing were received at the end of the comment period. As discussed in the interim final rule for hybrid PFD's published in the Federal Register on August 22, 1985 (50 FR 33923), no public hearings were held because the written comments received during the comment period provided such ample information with detailed recommendations that a public hearing would not, in all probability, provide any new information. Also, the concerns of those requesting public hearings had already been discussed in several public

meeting of the National Boating Safety Advisory Council (NBSAC), and were adequately documented for Coast Guard review and consideration. The Coast Guard, therefore, determined there was not a sufficient need for having a public hearing.

**Drafting Information**

The principal persons involved in drafting this rule were: Mr. Samuel Wehr, Office of Marine Safety, Security, and Environmental Protection, and Christena Green, Office of the Chief Counsel.

**Discussion of Comments and Revisions Made****General**

*Reliability and "Type" Designation of Inflatables as Opposed to Hybrids.* One commenter requested an explanation of why inflatables are to be approved for Type I PFD service while hybrids are being approved only for Type II or III service. The performance type assigned to the device is to designate differences in intended use and flotation performance for the device. Type I devices are reversible and provide face-up flotation, among other things. If a commercial hybrid PFD can be made to be reversible, to have the necessary face-up flotation performance, and to meet the other Type I performance requirements, it could be accepted for carriage in lieu of Type I on at least certain classes of vessels, if not all classes.

The commenter also stated that the hybrid would appear to be more reliable because of its inherent buoyancy. The reliability of all types of PFD's is basically equivalent but is achieved in different ways. Because hybrid PFD's have inherent buoyancy and are REQUIRED TO BE WORN, they are permitted to be serviced by the user instead of an approved servicing facility. Because inflatables have no inherent buoyancy and required wear is not practical on large commercial vessels, inflatable lifejackets are required to be serviced annually at an approved servicing facility to ensure an equivalent level of reliable operation. These differences were discussed in the Notice of Proposed Rulemaking (NPRM) (50 FR 21879-81) under the headings "5. Coast Guard Studies", "11. PFD Reliability", "13. Need for Annual Servicing", and "17. REQUIRED TO BE WORN". The preamble emphasized the need for professional servicing of inflatable lifejackets. The differences between hybrid and inflatable servicing requirements were also discussed in the



interim final rules for carriage of hybrid PFD's under the heading "7. Need for Annual Servicing" (51 FR 4339).

**Use of Inflatables on Recreational boats.** One commenter suggested that the Coast Guard evaluate overseas experience with use of inflatable lifejackets on recreational boats and permit their use on recreational boats in U.S. waters. Overseas experience was specifically solicited on the ANPRM. Many foreign governments responded and their comments are in the docket. There was no indication that inflatables would provide any additional benefit to recreational boating than hybrid PFD's. Further, Coast Guard studies discussed in the NPRM on inflatable lifejackets and hybrid PFD's indicate that a professional servicing program is needed to maintain continuing reliability of inflatable lifejackets. In a recreational boating environment, inflatables failed to operate approximately 20% of the time when not in a structured servicing program. Inflatables present a higher risk of fatalities than hybrids if not serviced regularly and properly. Since no satisfactory servicing program is available or could feasibly be developed for recreational boating, totally inflatable lifejackets are not being permitted to meet the carriage requirements on recreational boats at this time.

The Coast Guard continues to research ways to overcome this "operational reliability" problem. Proposals have been requested for research grants (54 FR 3552); data continues to be gathered on the use of hybrid PFD's; and discussions continue with industry, laboratory standards writing organizations, and state boating law administrators. When new hardware developments, carriage conditions, or other innovations reduce the risk of inflation failure to an acceptable level, a new rulemaking could be initiated to address this issue.

**Work Vest Approval.** Because of the apparent inconsistency in approving hybrids, but not inflatables, as work vests, one commenter suggested that inflatables might also be approved as work vests. This suggestion has not been adopted. It has not yet been demonstrated that an inflatable can be used in a work environment without significant unnoticed damage to an inflatable chamber making the device totally ineffective or otherwise rendering the device unserviceable. The inherent buoyancy in hybrids, however, permits them to be considered for use as work vests. As the studies mentioned in the NPRM indicate, the 10 pounds of inherent buoyancy in a commercial

hybrid provides adequate flotation for most people. The Coast Guard believes that the risk of a hybrid with a damaged inflation chamber not supporting a user is minimal. However, the risk is too great to be considered with an inflatable work vest which has a damaged inflation chamber or which has an automatic inflation system of unknown reliability.

**Use of Devices of the same or similar design.** One commenter recommended that inflatable lifejackets carried on board a vessel be required to be "identical" rather than "of the same or similar design and have the same method of operation". The commenter stated that use of different styles on the same craft would compromise the donning and use demonstration and thus cause confusion and increase donning time in an emergency. This comment has not been adopted. Requiring "identical" lifejackets would make it difficult to replace damaged lifejackets and allowing use of similar designs is considered sufficient to avoid confusion in use.

**Minimum Buoyancy Requirement.** One commenter suggested that a minimum buoyancy of 35 lb. be required in inflatable lifejackets. Such a requirement would be design restrictive and is unnecessary because the performance requirements for inflatable lifejackets in the rule provide the same or better support, while allowing for future innovations in design. Therefore, this comment has not been adopted.

**New Terminology.** The term "lifejacket" replaces "life preserver" in all but the existing regulations 46 CFR 160.001 in order to be consistent with SOLAS 74/83 terminology. In subpart 160.001 only one paragraph is changed, and it would be confusing to use "lifejacket" without changing the term throughout. All regulations which are revised to comply with SOLAS 74/83 will use the term "lifejacket".

**New Subpart Number.** Since all lifesaving equipment regulations which meet SOLAS 74/83 are using a one hundred series designation, the inflatable lifejacket subpart number has been changed from "160.076" to "160.176".

**Sections open to Comment.** Section 160.176-13(d) (3) & (4), Static Measurements & Average Requirements; section 160.176-13(g), Lanyard Pull Test; and section 160.176-19, Servicing, have been significantly changed due to public comments, International Maritime Organization (IMO) clarifications of SOLAS 74/83, and Coast Guard observations. The changes to these sections are discussed in detail in the

following section. As these items were not included in the notice of proposed rulemaking for this project, the Coast Guard is extending an opportunity for all interested parties to comment upon them. All comments submitted within the next forty-five days will be considered by the Coast Guard in determining whether to retain or make further modifications to these provisions.

Persons submitting comments should include their name and address, identify this rule as CGD 78-174b, and give the reasons for the comment. Persons desiring acknowledgment that their comments have been received should enclose a stamped self-addressed post card or envelope.

#### Other Changes or Suggested Changes to Specific Sections

**Section Reorganization.** The sections dealing with procedures for approval have been relocated to the front of the subpart to be consistent with other recent equipment approval subparts and to improve the clarity of the regulation. This change required renumbering several other sections. The reorganized section numbers are as follows:

Section No. in NPRM	Section No. in Final Rule	Section Title
160.076-1	160.176-1	Scope.
None	160.176-2	Application.
160.076-3	160.176-3	Definitions.
160.076-5	160.176-4	Incorporation by Reference.
160.076-25	160.176-5	Approval Procedures.
160.076-27	160.176-6	Procedure for Approval of Design or Material Revision.
160.076-29	160.176-7	Independent Laboratories.
160.076-7	160.176-8	Materials.
160.076-9	160.176-9	Construction.
160.076-11	160.176-11	Performance.
160.076-13	160.176-13	Approval Tests.
160.076-15	160.176-15	Production Tests and Inspections.
160.076-17	160.176-17	Manufacturer Records.
160.076-19	160.176-19	Servicing.
160.076-21	160.176-21	User Manuals.
160.076-23	160.176-23	Marking.

**Section 160.176-2, Application.** For clarity, a new section, "Application" has been added by taking material from the proposed "Scope".

**Section 160.176-3(h), Reference Vest.** One commenter stated that the reference vest could not be made according to the description in the proposal, and suggested a Type I PFD made according to Subpart 160.055 should be used. One of the tests which used the reference vest (§ 160.176-13(d))



has been revised to eliminate the need for the reference vest, but no alternative is yet available for the other test (§ 160.176-9(a)(7)). Therefore § 160.176-3(h) has been revised to parallel the hybrid subpart (§ 160.077-3(j)). The revised specification allows larger front insert envelopes.

**Section 160.176-5(c), Approval of Servicing Facilities.** This section has been rewritten to clarify the details of what must be submitted for approval and to correspond with the changes to the section on servicing, § 160.176-19.

**Section 160.176-8(a)(3), Use of Independent Laboratories.** Reference to subpart 159.010 has been added to clarify the procedures for laboratory acceptance. This section has been changed to be consistent with hybrid PFD interim final rule published August 22, 1985 (50 FR 33923).

**Section 160.176-8, Material Requirements.** The weathering resistance requirement is dropped where the material is suitably shielded from UV exposure and the retained strength requirement is reduced from 45% to 40%. For the fungus resistance requirement, materials that are covered in use are permitted to be tested with the covering. For the corrosion resistance requirements, expendable elements are exempted from this requirement, and the alternative to run a salt spray test is provided. These sections have been changed to be consistent with the hybrid PFD interim final rule published August 22, 1985 (50 FR 33923).

**Section 160.176-8(a)(4), Weathering Resistance.** Two commenters suggested that this section be revised or that implementation be delayed to allow more materials to become available which meet the requirement. Two revisions, the waiver of the requirement if the material is suitably covered to protect it, and the change from 45% to 40% strength retention, which were made in the hybrid PFD interim final rule, have been made to the requirements in this section. These changes make an ample supply of materials available.

**Section 160.176-9(a)(6), Reversibility.** One commenter stated that the requirement for inflatable lifejackets to be reversible was unnecessary and might eliminate some superior designs. The requirement for reversibility is intended to increase the ease of donning, especially under conditions of poor lighting, and for this reason it is also a requirement of SOLAS 74/83. However, SOLAS also allows non-reversible designs as long as they can only be donned in one way. Section

160.176-9(a)(6) has been revised to include this exception.

**Section 160.176-13(b)(3) and (4), Donning Test.** One commenter questioned the feasibility of the 30 second donning requirement, suggested that there should be a disqualification procedure using a reference vest, and requested a description of the "jersey gloves" required to be used in this test. The 30 second requirement is feasible. Averaging effectively eliminates the need for a disqualification procedure. The term "jersey gloves" refers to gloves made from heavy, cotton-knit fabric and the section has been revised to reflect this description.

**Section 160.176-13(d)(2)(ii), Righting Test.** One commenter suggested that there should be a test subject disqualification procedure using a reference vest for this test and the tests in §§ 160.176-13(d)(3) and (4) and 160.176-13(f). Swim test subjects sometimes fail to perform properly and thereby adversely affect the test results for the lifejacket being tested. Accordingly, the test procedure must provide for discounting the results from such subjects. It is the testing organization's responsibility to correct the performance of a subject who is not following the test procedures. SOLAS 74/83 makes no provision for disregarding the results of a test subject because of poor results in a reference vest. It is, however, sometimes difficult to detect some subject performance problems. The use of the reference vest described in the hybrid regulation, § 160.176-3(h), is recommended for training and evaluation of test subjects but not for one-to-one comparison of each test result. Therefore the proposal has not been changed.

**Other In-water Tests.** One commenter suggested that several other tests should also be run in comparison to a reference vest or be modified. Comments on the following have not been adopted because (as noted above) they were not consistent with SOLAS 74/83 or were impractical:

**Section 160.176-13(d)(3) and (4), Static Measurements and HELP Position Tests.**

**Section 160.176-13(f), Water Emergence.**

**Section 160.176-13(d)(3) and (4), Static Measurements & Average Requirements.** The freeboard, torso angle, and face plane angle requirements have been revised in § 160.176-13(d)(3) and average requirements added in a new § 160.176-13(d)(4) to reflect a clarification of the SOLAS 74/83 requirements approved by the International Maritime Organization (IMO).

**Section 160.176-13(e), Jump Test.** One commenter stated that there should be a warning about the potential for injury from this test and suggested that subjects be advised to wear protective clothing during this test. The advisory note in § 160.176-13(e) has been revised accordingly. Additionally, paragraphs (2) and (3) of this section have been rewritten for greater clarity.

**Section 160.176-13(g), Lanyard Pull Test.** The lanyard test has been divided into two tests to add an evaluation of the strength of the lanyard in addition to the force necessary to activate the inflation mechanism. Since activation of the lifejacket manual inflation mechanism is achieved through pulling on the lanyard, failure of the lanyard could be a critical defect. Therefore, this additional test is necessary.

**Section 160.176-13(h), Temperature Cycling Tests.** Paragraph (2) of this section has been rewritten for greater clarity and to specify the temperature of the water to be used to activate the automatic inflation mechanisms. The temperature is the same as the test for hybrid PFD's.

**Section 160.176-13(m), Salt Spray Exposure and Section 160.176-13(m)(2), Rain Exposure.** One commenter questioned the duration of the salt spray test. The proposed duration of 760 hours was an error and has been corrected to 720 hours. Another commenter stated that it was unreasonable to expect an automatic inflation mechanism not to prematurely inflate during these tests. If a cover on the inflation mechanism is part of the lifejacket design, the inflation mechanism may remain covered during the test. This should preclude premature inflation.

**Minor Changes.** The following sections have been revised as a result of the comments:

Figure 160.176-13(n)(2) has been redrawn.

In Section 160.176-13(q) the fuel depth has been changed to 1 inch.

In Section 160.176-13(t) the maximum pressure loss has been increased from 4% to 5%.

**Section 160.176-13(r), Solvent Exposure.** One commenter suggested that the test fuel used and the duration of this test should be changed because it was believed to be excessive and unrealistic. The duration is not excessive but the effects of the fuel are perhaps more pernicious than might be expected in the intended use environment. The 24 hour exposure is a SOLAS 74/83 requirement and represents the cumulative effects of liquid fuel and fuel vapors on the device over its useful life. Reference fuel B,



however, is a more volatile fuel than is used on commercial vessels. The Coast Guard has, therefore, changed the test fuel to diesel fuel.

**Section 160.176-13(u). Seam Strength.** One commenter stated that he believed that the requirement for seam strength stated as 80% of the fabric breaking strength was too restrictive and would eliminate some perfectly good materials. The problem with an 80% requirement is that when a very heavy duty fabric is used, then an equally heavy duty thread is required, when in fact a lighter thread may provide a service life exceeding that of the other components in the lifejacket. Lighter threads are easier to work with and the requirement may actually discourage the use of more durable fabrics. Although the 80% requirement is believed to be good design practice in most cases, it probably is excessive in this case and has been deleted.

**Section 160.176-19. Servicing.** One commenter stated that the requirement to have the lifejackets sent out to a servicing facility would be time consuming, expensive, and would require having a large supply of extra lifejackets on hand. He stated that there should be some provision to allow a company to have its own trained/certified employee service the equipment. The Coast Guard agrees. The interim final rule has been revised to provide for approval of such companies as "other servicing facilities".

Although not significantly different than originally envisioned, more detail has been added to clarify the provisions of this section according to the above.

It should be noted that the Coast Guard is working on revisions to the liferaft servicing requirements under Docket CGD 81-010 (revised Subpart 160.051). Advance notice of this related rulemaking was published in the Federal Register of August 14, 1988 (51 FR 29117). If that rulemaking results in significant improvements over the lifejacket servicing program in this rule, the Coast Guard will initiate further rulemaking to revise the servicing provisions for inflatable lifejackets.

**Section 160.176-21. User Manuals.** This section has been revised to clarify who must provide the manuals and to whom they must be provided. This section has also been reorganized for greater clarity.

#### Regulatory Evaluation

These regulations are considered to be non-major under Executive Order 12291 and non-significant under Department of Transportation regulatory policies and procedures (44 FR 11034, February 26, 1979). A regulatory

evaluation has been prepared and placed in the rulemaking docket. It may be inspected and copied at the address listed above under ADDRESSES. Copies may also be obtained by contacting the person listed under FOR FURTHER INFORMATION CONTACT.

The evaluation provides a detailed explanation of the estimated costs of these proposed regulations. The total approval costs per design are expected to be approximately \$4000 for inflatables. Costs to approve other types of PFD's are approximately \$2000. The additional cost to approve inflatable lifejackets could easily be absorbed in the cost of the units produced. The cost increase would be small when considering the number of lifejackets to be produced under authorization of each approval certificate. The Coast Guard anticipates that within the first year after issuing the interim final rules, one or two inflatable lifejacket designs would be approved.

Production inspection costs imposed by these regulations would be approximately \$1,000 for the largest size lot of inflatable lifejackets permitted. This cost is similar to that incurred for other types of approved PFD's.

The retail cost, per device, is expected to be \$100-\$200 for inflatable lifejackets. These costs would be optional since carriage is optional. Currently approved PFD's range in price from \$7 to \$200 with an average cost of about \$40.00 for Type I devices that could be replaced by inflatable lifejackets.

These regulations provide an alternative to users for whom limited stowage space or other operational considerations make the carriage of conventional inherently buoyant PFD's impractical or inadvisable. For these users, the optional carriage of inflatable lifejackets will meet their specific operational needs and will therefore justify the higher cost relative to inherently buoyant PFD's.

These regulations will have little or no effect on federal, state, or local governments except in their capacities as consumers of PFD's. Coast Guard steps to implement these rules will be done within the scope of ongoing marine safety activities, and there will be no need for additional federal budget commitments.

Based upon the information in the evaluation, as discussed above, the Coast Guard certifies that this rule will not have a significant economic impact on a substantial number of small entities.

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12812, and it has been determined that

the rulemaking does not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment.

#### Paperwork Reduction Act

The reporting and recordkeeping requirements in this regulation were reviewed by the Office of Management and Budget for approval under the Paperwork Reduction Act. The requirements listed below were approved on March 1, 1988, under consolidated OMB Number 2115-0141, "Reporting and Recordkeeping Requirements for Fire Fighting Equipment, Structural Fire Protection Materials, Lifesaving Equipment, and Marine Sanitation Devices".

Paperwork Requirements	OMB Approval Numbers
a. § 160.176-5.....	2115-0141
b. § 160.176-6.....	2115-0141
c. § 160.176-8(a).....	2115-0141
d. § 160.176-17.....	2115-0141
e. § 160.176-19.....	2115-0141
f. § 160.176-21.....	2115-0141
g. § 160.176-23.....	2115-0141

#### List of Subjects in 46 CFR Part 160

Marine safety, Reporting and recordkeeping requirements, Incorporation by reference.

#### Regulations

In consideration of the foregoing, part 160 of title 46 of the Code of Federal Regulations is amended as set out below:

#### PART 160—LIFESAVING EQUIPMENT

1. The authority citation for part 160 is revised to read as follows:

Authority: 46 U.S.C. 3306, 3703, 4104, and 4302; E.O. 12234, 45 FR 58801, 3 CFR, 1990 Comp., p. 277; 49 CFR 1.48.

2. The Table of Contents for part 160 is amended by adding subpart 160.176 to read as follows:

#### Subpart 160.176—Inflatable Lifejackets

Sec.	
160.176-1	Scope.
160.176-2	Application.
160.176-3	Definitions.
160.176-4	Incorporation by Reference.
160.176-5	Approval Procedures.
160.176-6	Procedure for Approval of Design or Material Revision.
160.176-7	Independent Laboratories.
160.176-8	Materials.
160.176-9	Construction.
160.176-11	Performance.
160.176-13	Approval Tests.
160.176-15	Production Tests and Inspections.



Sec.  
160.176-17 Manufacturer Records.  
160.176-19 Servicing.  
160.176-21 User Manuals.  
160.176-23 Marking.  
\* \* \*

3. Paragraph (c) of § 160.001-2 is revised to read as follows:

**§ 160.001-2 General characteristics of life preservers.**

(c) Life preservers which depend upon loose or granulated material for buoyancy are prohibited.  
\* \* \*

4. A new subpart 160.176 is added to read as follows:

**Subpart 160.176—Inflatable Lifejackets**

**§ 160.176-1 Scope.**

(a) This subpart contains structural and performance standards and procedures for approval of inflatable lifejackets, as well as requirements for associated manuals, servicing programs, and shore-side service facilities.

(b) Other regulations in this chapter provide that inflatable lifejackets must be:

(1) Serviced annually at designated servicing facilities; and

(2) Maintained in accordance with their user manuals.

(c) Inflatable lifejackets approved under this subpart—

(1) Rely entirely upon inflation for buoyancy;

(2) Meet the requirements for lifejackets in the 1983 Amendments to the International Convention for the Safety of Life at Sea, 1974 (SOLAS 74/83);

(3) Have performance equivalent to Type I Personal Flotation Devices (PFD's) with any one chamber deflated; and

(4) Are designed to be worn by adults.

**§ 160.176-2 Application.**

(a) Inflatable lifejackets approved under this subpart may be used to meet carriage requirements for Type I PFD's only on:

(1) Uninspected submersible vessels; and

(2) Inspected vessels for which a servicing program has been approved by the Commandant.

**§ 160.176-3 Definitions.**

(a) "Commandant" means the Chief of the Survival Systems Branch, U.S. Coast Guard Office of Merchant Marine Safety. Address: Commandant (G-MVI-3/4), U.S. Coast Guard Headquarters, 2100 Second St. SW., Washington, D.C. 20593-0001.

(b) "First quality workmanship" means construction which is free from any defect materially affecting appearance or serviceability.

(c) "Functional deterioration" means—

(1) Damage such as deformation in hardware or a rip, tear, or loose stitches;

(2) Decline in any performance characteristic; or

(3) Any other change making the lifejacket unfit for use.

(d) "Functional residual capacity" (FRC) means the amount of lung volume a person has remaining at the bottom of the normal breathing cycle when at rest.

(e) "Inflation medium" means any solid, liquid, or gas, that, when activated, provides inflation for buoyancy.

(f) "Inspector" means an independent laboratory representative assigned to perform the duties described in § 160.176-15 of this subpart.

(g) "PFD" means personal flotation device as defined in 33 CFR 175.13.

(h) "Reference vest" means a model AK-1 PFD meeting Subpart 160.047 of this part, except that, in lieu of the weight and displacement values prescribed in Tables 160.047-4(c)(2) and § 160.047-4(c)(4), each front insert must have a weight of kapok of at least 8.25 oz. and a volume displacement of  $9.0 \pm 0.25$  lb., and the back insert must have a weight of kapok of at least 5.5 oz. and a volume displacement of  $8.0 \pm 0.25$  lb. To achieve the specified volume displacement, front insert envelopes may be larger than the dimensions prescribed by § 160.047-1(b).

(i) [Reserved]

(j) "Second stage donning" means adjustments or steps necessary to make a lifejacket provide its intended flotation characteristics after the device has been properly donned and then inflated.

**§ 160.176-4 Incorporation by reference.**

(a) Certain materials are incorporated by reference into this subpart with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than the one listed in paragraph (b) of this section, notice of the change must be published in the Federal Register and the material made available to the public. All approved material is on file at the Office of the Federal Register, 1100 L Street, NW., Washington, DC and at the U.S. Coast Guard, Survival Systems Branch (G-MVI-3), 2100 Second Street, SW., Washington, DC 20593-0001, and is available from the sources indicated in Paragraph (b) of this section.

(b) The materials approved for incorporation by reference in this subpart, and the sections affected are:

*American Society for Testing and Materials (ASTM)*

1916 Race St., Philadelphia, PA 19103

ASTM B 177-73/79 Standard Method of Salt Spray (Fog) Testing, 1973—160.176-8; 160.176-13

ASTM D 751-79 Standard Methods of Testing Coated Fabrics, 1979—160.176-13  
ASTM D 975-81 Standard Specification for Diesel Fuel Oils, 1981—160.176-13

ASTM D 1434-75 Gas Transmission Rate of Plastic Film and Sheeting, 1975—160.176-13

*Federal Aviation Administration Technical Standard Order*

Policy and Procedure Br., AWS-110, Aircraft Engineering Division, Office of Airworthiness, 800 Independence Ave., SW., Washington, DC 20591  
TSO-C13d, Federal Aviation Administration Standard for Life Preservers, January 3, 1983—160.176-8

*Federal Standards*

Naval Publications and Forms Center, Customer Service, Code 1052, 5801 Tabor Ave., Philadelphia, PA 19120

In Federal Test Method Standard No. 191A (dated July 20, 1978) the following methods:

(1) Method 5100, Strength and Elongation, Breaking of Woven Cloth; Grab Method—160.176-13

(2) Method 5132, Strength of Cloth, Tearing; Falling-Pendulum Method—160.176-13

(3) Method 5134, Strength of Cloth, Tearing; Tongue Method—160.176-13

(4) Method 5804.1, Weathering Resistance of Cloth; Accelerated Weathering Method—160.176-8

(5) Method 5762, Mildew Resistance of Textile Materials; Soil Burial Method—160.176-8

Federal Standard No. 751a, Stitches, Seams, and Stitching, January 25, 1965—160.176-9

*Military Specifications*

Naval Publications and Forms Center, Customer Service, Code 1052, 5801 Tabor Ave., Philadelphia, PA 19120

MIL-L-24611—Life Preserver Support Package For Life Preserver, MK 4, dated May 18, 1982—160.176-8

*National Institute of Standards and Technology (NIST) (formerly National Bureau of Standards)*

C/O Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402

Special Pub. 440, *Color: Universal Language and Dictionary of Names*; "The Universal Color Language" and "The Color Names Dictionary", 1976—160.176-9

*Underwriters Laboratories (UL)*

Underwriters Laboratories, Inc., P.O. Box 13995, Research Triangle Park, NC 27709-3995



UL 1191, "Components for Personal Flotation Devices", November 11, 1984—160.176-8; 160.176-13

#### § 160.176-5 Approval procedures.

(a) *Modifications to general procedures.* Subpart 159.005 of this chapter contains the approval procedures. Those procedures must be followed, except as modified in this paragraph.

(1) Preapproval review under §§ 159.005-5 and 159.005-7 may be omitted if a similar design has already been approved.

(2) The information required under § 159.005-5(a)(2) (i) through (iii) of this chapter must be included in the application.

(3) The application must also include the following:

(i) The Type of performance (i.e. Type I or Type V) that the lifejacket is designed to provide.

(ii) Any special purpose(s) for which the lifejacket is designed and the vessel(s) or vessel type(s) on which its use is planned.

(iii) Buoyancy and torque tolerances to be allowed in production.

(iv) The text of any optional marking to be provided in addition to required text.

(v) The service manual and written guidelines required by §§ 160.176-19(c) and 160.176-19(d) of the part and the user's manual required by § 160.176-21 of this Part.

(vi) A list of proposed servicing facilities.

(4) The description of quality control procedures required by § 159.005-9 of this chapter to be submitted with the test report may be omitted as long as the manufacturer's planned quality control procedures comply with § 160.176-15 of this part.

(5) The test report must include, in addition to information required by § 159.005-9 of this chapter, a report of inspection of each proposed servicing facility. The report must include the time, date, place, and name of the person doing the inspection and observations that show whether the facility meets §§ 160.176-19(b)(2), 160.176-19(b)(4), and 160.176-19(d) of this part.

(6) The certificate of approval, when issued, is accompanied by a letter to the manufacturer listing the servicing facilities that have been approved. Copies of the letter are also provided for each facility.

(7) An approval will be suspended or terminated under § 159.005-15 of this chapter if the manufacturer fails to maintain approved servicing facilities that meet § 160.176-19 of this part.

(b) *Manuals and guidelines.* The manuals and servicing facility guidelines required by this subpart are reviewed with the application for lifejacket approval. Changes will be required if needed to comply with §§ 160.176-19 and 160.176-21 of this Part.

(c) *Approval of servicing facilities.* (1) Approval of servicing facilities initially proposed for use is considered during and as a part of the lifejacket approval process described in paragraph (a) of this section.

(2) Other servicing facilities may subsequently be considered for approval, upon submission of a letter of application to Commandant containing each of the applicable items required of manufacturers and laboratories under § 159.005-5 of this Chapter and the following:

(i) A copy of guidelines meeting § 160.176-19(d) of this Part, if different from those originally approved with the lifejacket;

(ii) A list of the sources the servicing facility proposes to use for parts and manuals for the servicing of the make and model of lifejacket applied for; and

(iii) A report of inspection prepared by an independent laboratory which includes the time, date, and place of the inspection, the name of the inspector, and observations that show whether the facility meets §§ 160.176-19(b)(2) through 160.176-19(b)(4) and 160.176-19(d) of this part.

(3) To conduct servicing at a remote or mobile site, the servicing facility must be authorized in its letter of approval to conduct this type of servicing. Approval for servicing at these sites is obtained according to paragraph (c)(2) of this section except that portable or mobile equipment must be available when evaluating the compliance with § 160.176-19(b)(3) of this part.

(4) Each change to equipment, procedure, or qualification and training of personnel of an approved servicing facility must be also approved.

(d) *Waiver of tests.* If a manufacturer requests that any test in this subpart be waived, one of the following must be provided to the Commandant as justification for the waiver:

(1) Acceptable test results on a lifejacket of sufficiently similar design.

(2) Engineering analysis showing that the test is not applicable to the particular design or that by design or construction the lifejacket can not fail the test.

(e) *Alternative requirements.* A lifejacket that does not meet requirements in this subpart may still be approved if the device—

(1) Meets other requirements prescribed by the Commandant in place

of or in addition to requirements in this subpart; and

(2) Provides at least the same degree of safety provided by other lifejackets that do comply with this subpart.

#### § 160.176-6 Procedure for approval of design or material revision.

(a) Each change in design, material, or construction must be approved by the Commandant before being used in lifejacket production.

(b) Determinations of equivalence of design, construction, and materials may only be made by the Commandant.

#### § 160.176-7 Independent laboratories.

A list of independent laboratories which have been accepted by the Commandant for conducting or supervising the following tests and inspections required by this subpart, may be obtained from the Commandant:

(a) Approval tests.

(b) Production tests and inspections.

(c) Inspection of approved servicing facilities.

(d) Testing of materials for the purpose of making the certification required by § 160.176-8(a)(3) of this part.

#### § 160.176-8 Materials.

(a) *General—(1) Certification.* Each lot of material used in manufacturing lifejackets must have a certification of compliance with the requirements in this section. The certification must be made by the lifejacket manufacturer, the material supplier, or an independent laboratory accepted by the Commandant in accordance with Subpart 159.010 of this Chapter to make the certification. Each certification by a lifejacket manufacturer or a supplier must be accompanied by test results that show compliance with this section and must be notarized. Each certification by an independent laboratory must state the laboratory's acceptance.

(2) *Condition of materials.* All materials must be new.

(3) *Temperature range.* Unless otherwise specified in standards incorporated by reference in this section, all materials must be usable in all weather conditions throughout a temperature range of  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  to  $+150^{\circ}\text{F}$ ).

(4) *Weathering resistance.* Each non-metallic component which is not suitably covered to shield against ultraviolet exposure must retain at least 40% of its strength after being subjected to 300 hours of sunshine carbon arc weathering as specified by Method 5804.1 of Federal Test Method Standard Number 191A.



(5) *Fungus resistance.* Each non-metallic component must retain at least 90% of its strength after being subjected to the mildew resistance test specified by Method 5762 of Federal Test Method Standard No. 191A when untreated cotton is used as the control specimen. Also, the gas transmission rate of inflation chamber materials must not be increased by more than 10% after being subjected to this test. Materials that are covered when used in the lifejacket may be tested with the covering material.

(6) *Corrosion resistance.* Each metal component must—

(i) Be galvanically compatible with each other metal part in contact with it; and

(ii) Unless it is expendable (such as an inflation medium cartridge), be 410 stainless steel, have salt water and salt air corrosion characteristics equal or superior to 410 stainless steel, or perform its intended function and have no visible pitting or other damage on any surface after 720 hours of salt spray testing according to ASTM B 117.

(7) *Materials not covered.* Materials having no additional specific requirements in this section must be of good quality and suitable for the purpose intended.

(b) *Fabric—(1) All fabric.* All fabric must—

(i) Be of a type accepted for use on Type I life preservers approved under Subpart 160.002 of this part; or

(ii) Meet the Type V requirements for "Fabrics for Wearable Devices" in UL 1191 except that breaking strength must be at least 400 N (90 lb.) in both directions of greater and lesser thread count.

(2) *Rubber coated fabric.* Rubber coated fabric must be of a copper-inhibiting type.

(c) *Inflation chamber materials.—(1) All materials.* (i) The average permeability of inflation chamber material, determined according to the procedures specified in § 160.176-13(y)(3) of this Part, must not be more than 110% of the permeability of the materials determined in approval testing prescribed in § 160.176-13(y)(3) of this part.

(ii) The average grab breaking strength and tear strength of the material, determined according to the procedures specified in §§ 160.176-13(y)(1) and 160.176-13(y)(2) of this Part, must be at least 90% of the grab breaking strength and tear strength determined from testing prescribed in §§ 160.176-13(y)(1) and 160.176-13(y)(2) of this Part. No individual sample result for breaking strength or tear strength may be more than 20% below the results obtained in approval testing.

(2) *Fabric covered chambers.* Each material used in the construction of inflation chambers that are covered with fabric must meet the requirements specified for—

(i) "Bladder" materials in section 3.2.6 of MIL-L-24611(SH) if the material is an unsupported film; or

(ii) Coated fabric in section 3.1.1 of TSO-C13d if the material is a coated fabric.

(3) *Uncovered chambers.* Each material used in the construction of inflation chambers that are not covered with fabric must meet the requirements specified in paragraph (c)(2)(ii) of this section.

(d) *Thread.* All thread used in structural seams must meet § 160.001-2(j) of this chapter. Thread and fabric combinations must have similar elongation and durability characteristics.

(e) *Webbing.* Webbing used as a body strap, tie tape or drawstring, or reinforcing tape must meet § 160.002-3(e), § 160.002-3(f), § 160.002-3(h) of this part respectively. Webbing used for tie tape or drawstring must easily hold a knot and be easily tied and untied. Webbing used as reinforcing tape must not chafe the wearer.

(f) *Closures—(1) Strength.* Each buckle, snap hook, dee ring or other type of fastening must have a minimum breaking strength of 1600 N (360 lbs). The width of each opening in a closure, through which body strap webbing passes, must be the same as the width of that webbing.

(2) *Means of Locking.* Each closure used to secure a lifejacket to the body, except a zipper, must have a quick and positive locking mechanism, such as a snap hook and dee ring.

(3) *Zipper.* If a zipper is used to secure the lifejacket to the body, it must be—

(i) Easily initiated;

(ii) Non-jamming;

(iii) Right handed;

(iv) Of a locking type; and

(v) Used in combination with another type of closure that has a quick and positive means of locking.

(g) *Inflation medium.* (1) No inflation medium may contain any compound that is more toxic than CO<sub>2</sub> if inhaled through any of the oral inflation mechanisms.

(2) Any chemical reaction of inflation medium during inflation must not produce a toxic residue.

(h) *Adhesives.* Adhesives must be waterproof and acceptable for use with the materials being bonded.

(i) [Reserved]

(j) *Retroreflective Material.* Each lifejacket must have at least 200 sq. cm. (31 sq. in.) of retroreflective material on

its front side, at least 200 sq. cm. on its back side, and at least 200 sq. cm. of material on each reversible side. The retroreflective material must be Type I material that is approved under Subpart 164.018 of this chapter. The retroreflective material attached on each side must be divided equally between the upper quadrants of the side. Attachment of retroreflective material must not impair lifejacket performance or durability.

(k) *PFD Light.* Each lifejacket must have a PFD light that is approved under Subpart 161.012 of this chapter. The light must be securely attached to the front shoulder area of the lifejacket. Attachment of the light must not impair lifejacket performance.

#### § 160.176-9 Construction.

(a) *General Features.* Each inflatable lifejacket must—

(1) Have at least two inflation chambers;

(2) Be constructed so that the intended method of donning is obvious to an untrained wearer;

(3) If approved for use on a passenger vessel, be inside a sealed, non-reusable package that can be easily opened;

(4) Have a retainer for each adjustable closure to prevent any part of the closure from being easily removed from the lifejacket;

(5) Be universally sized for wearers weighing over 40 kg. (90 pounds) and have a chest size range of at least 76 to 120 cm. (30 to 52 in.);

(6) Unless the lifejacket is designed so that it can only be donned in one way, be constructed to be donned with either the inner or outer surface of the lifejacket next to the wearer (be reversible);

(7) Not have a channel that can direct water to the wearer's face to any greater extent than that of the reference vest defined in § 160.176-3(h) of this part;

(8) Not have edges, projections, or corners, either external or internal, that are sharp enough to damage the lifejacket or to cause injury to anyone using or maintaining the lifejacket;

(9) Have a means for drainage of entrapped water;

(10) Be primarily vivid reddish orange, as defined by sections 13 and 14 of the "Color Names Dictionary," on its external surfaces;

(11) Be of first quality workmanship;

(12) Unless otherwise allowed by the approval certificate—

(i) Not incorporate means obviously intended for attaching the lifejacket to the vessel; and



(ii) Not have any instructions indicating attachment to a vessel is intended; and

(13) Meet any additional requirements that the Commandant may prescribe, if necessary, to approve unique or novel designs.

(b) Inflation mechanisms. (1) Each inflatable lifejacket must have

(i) At least one automatic inflation mechanism;

(ii) At least two manual inflation mechanisms on separate chambers;

(iii) At least one oral inflation mechanism on each chamber; and

(iv) At least one manual inflation mechanism or one automatic inflation mechanism on each inflation chamber.

(2) Each inflation mechanism must

(i) Have an intended method of operation that is obvious to an untrained wearer;

(ii) Not require tools to activate the mechanism;

(iii) Be located outside its inflation chamber; and

(iv) Be in a ready to use condition.

(3) Each oral inflation mechanism must

(i) Be easily accessible after inflation for the wearer to "top off" each chamber by mouth;

(ii) Operate without pulling on the mechanism;

(iii) Not be able to be locked in the open or closed position; and

(iv) Have a non-toxic mouthpiece.

(4) Each manual inflation mechanism must

(i) Provide an easy means of inflation that requires only one deliberate action on the part of the wearer to actuate it;

(ii) Have a simple method for replacing its inflation medium cartridge; and

(iii) Be operated by pulling on an inflation handle that is marked "Jerk to Inflate" at two visible locations.

(5) Each automatic inflation mechanism must

(i) Have a simple method for replacing its inflation medium cartridge and water sensitive element;

(ii) Have an obvious method of indicating whether the mechanism has been activated; and

(iii) Be incapable of assembly without its water sensitive element.

(6) The marking required for the inflation handle of a manual inflation mechanism must be waterproof, permanent, and readable from a distance of 2.5 m (8 feet).

(c) Deflation mechanism. (1) Each chamber must have its own deflation mechanism.

(2) Each deflation mechanism must

(i) Be readily accessible to either hand when the lifejacket is worn while inflated;

(ii) Not require tools to operate it;

(iii) Not be able to be locked in the open or closed position; and

(iv) Have an intended method of operation which is obvious to an untrained wearer.

(3) The deflation mechanism may also be the oral inflation mechanism.

(d) Sewn seams. Stitching used in each structural seam of a lifejacket must provide performance equal to or better than a Class 300 Lockstitch meeting Federal Standard No. 751a.

(e) Textiles. All cut edges of textile materials must be treated or sewn to minimize raveling.

(f) Body strap attachment. Each body strap assembly must be securely attached to the lifejacket.

#### **§ 160.176-11 Performance.**

(a) General. Each inflatable lifejacket must be able to pass the tests in § 160.176-13 of this Part.

(b) Snag Hazard. The lifejacket must not present a snag hazard when properly worn.

(c) Chamber Attachment. Each inflation chamber on or inside an inflatable lifejacket must not be able to be moved to a position that-

(1) Prevents full inflation; or

(2) Allows inflation in a location other than in its intended location.

(d) Comfort. The lifejacket must not cause significant discomfort to the wearer during and after inflation.

#### **§ 160.176-13 Approval Tests.**

(a) General. (1) This section contains requirements for approval tests and examinations of inflatable lifejackets. Each test or examination must be conducted or supervised by an independent laboratory. The tests must be done using lifejackets that have been constructed in accordance with the plans and specifications in the application for approval. Unless otherwise specified, only one lifejacket, which may or many not have been subjected to other tests, is required to be tested in each test. One or more lifejackets that have been tested as prescribed in paragraph (h) of this section must be used for the tests prescribed in paragraphs (j), (n), (q), and (r) of this section. The tests prescribed in paragraph (y) of this section require one or more lifejackets as specified in that paragraph.

(2) All data relating to buoyancy and pressure must be taken at, or corrected to, an atmospheric pressure of 760 mm (29.92 inches) of mercury and a temperature of 20°C (68°F).

(3) The tests in this section are not required to be run in the order listed, except where a particular order is specified.

(4) Some tests in this section require a lifejacket to be tested while being worn. In each of these tests the test subjects must represent a range of small, medium, and large heights and weights. Unless otherwise specified, a minimum of 18 test subjects, including both males and females, must be used. The test subjects must not be practiced in the use of the lifejacket being tested. However, they must be familiar with the use of other Coast Guard approved lifejackets. Unless specified otherwise, test subjects must wear only swim suits. Each test subject must be able to swim and relax in the water.

**Note:** Some tests have inherent hazards for which adequate safeguards must be taken to protect personnel and property in conducting the tests.

(b) Donning. (1) No second stage donning is allowed in the tests in this paragraph. An uninflated lifejacket with size adjustment at its mid-range is given to each test subject with the instruction: "Please don as quickly as possible, adjust to fit snugly, and inflate." Each subject must, within one minute, don the uninflated lifejacket, adjust it to fit snugly, and then inflate it.

(2) The average time of all subjects to complete the test in paragraph (b)(1) of this section must not exceed 30 seconds. The criteria in this paragraph do not apply to the tests in paragraphs (b)(3) and (b)(4) of this section.

(3) The test in paragraph (b)(1) of this section is repeated with each subject wearing an insulated, hooded parka and gloves made from heavy, cotton-jersey (knit) fabric.

(4) The test in paragraph (b)(1) of this section is then repeated twice more with a fully inflated lifejacket. In the first test the subjects must wear swim suits and in the second test, parka and gloves.

(c) Inflation tests. No second stage donning is allowed in the tests in this paragraph. A lifejacket with each automatic inflation mechanism disabled must be used for the tests prescribed in paragraphs (c)(1) and (c)(2) of this section.

(1) Each test subject dons an uninflated lifejacket and is instructed to enter the water and swim for approximately 30 seconds and then, on command, inflate the lifejacket using only oral inflation mechanisms. Within 30 seconds after the command is given, the lifejacket must be sufficiently inflated to float each subject with respiration unimpeded.



(2) Each test subject dons an uninflated lifejacket and is instructed to enter the water and swim for approximately 30 seconds, bring both hands to the surface, and then, on command, inflate the lifejacket using each manual inflation mechanism. Each test subject must find and operate all the manual inflation mechanisms within 5 seconds after the command is given. The manual inflation mechanisms must inflate the lifejacket sufficiently to float the wearers within 5 seconds after the mechanisms are operated. Within 20 seconds after activation each subject must be floating in the position described in paragraph (d)(3) of this section.

(3) One small and one large test subject don uninflated lifejackets and jump feet first from a height of 1 meter into the water. The automatic inflation mechanisms must inflate the lifejackets sufficiently to float the wearers within 10 seconds after the subjects enter the water. Within 20 seconds after entering the water each subject must be floating in the position described in paragraph (d)(3) of this section.

(4) Air at a pressure of 4.2 kPa (0.6 psig) is applied separately to each oral inflation mechanism of — (i) a packed lifejacket if the lifejacket is provided in a reusable package; or (ii) an unpacked lifejacket if it is provided with no package or is in a sealed or non-reusable package. In each application the chamber must fully inflate within 1 minute.

(5) Each oral inflation mechanism of an unpacked lifejacket is connected to a regulated air source constantly supplying air at a pressure of 7 kPa (1 psig). Each mechanism must pass at least 100,000 cc of air per minute.

(d) *Flotation stability*—(1) *Uninflated flotation stability*. Lifejackets with their automatic inflation mechanisms disabled must be used for this test. Each subject dons an uninflated lifejacket, enters the water, and assumes an upright, slightly back of vertical, position. Each subject then relaxes. For each subject that floats, the uninflated lifejacket must not tend to turn the wearer face-down when the head is allowed to fall back.

(2) *Righting action*. (i) Each test subject dons an uninflated lifejacket, enters the water, allows the automatic inflation mechanism to inflate the lifejacket, and swims for 30 seconds. While swimming, freedom of movement and comfort are observed and noted by the person conducting the test. Freedom of movement and comfort must comply with § 160.176-11(d). Also, each subject must demonstrate that the lifejacket can

be adjusted while the subject is in the water.

(ii) Each subject then takes three gentle breast strokes and while still face-down in the water, relaxes completely while slowly exhaling to FRC. Each subject remains in this limp position long enough to determine if the lifejacket will turn the subject from the face-down position to a position in which the subject's breathing is not impaired. The time from the last breast stroke until breathing is not impaired is recorded. Each subject repeats these steps three times, and the average time for the three righting action is calculated. This average time must not exceed 5 seconds.

(iii) If the lifejacket does not have automatic inflation mechanisms for all chambers, the tests in paragraphs (d)(2)(i) and (d)(2)(ii) of this section are repeated with each lifejacket fully inflated.

(iv) Each subject then performs the test in paragraph (d)(2)(ii) of this section with one chamber of the lifejacket deflated. This test is then repeated as many times as necessary to test the lifejacket with a different chamber deflated until each chamber has been tested in this manner.

(v) Each subject then performs the test in paragraph (d)(2)(ii) of this section but exhales to FRC at the end of the third breast stroke and holds the breath prior to relaxing.

(3) *Static measurements*. At the end of each test with each subject in § 160.176-13(d)(2)(ii), through § 160.176-13(d)(2)(v)—

(i) The freeboard (the distance from the water surface to the bottom of the mouth) must be at least 100 mm (4.0 in.) without repositioning of any part of the body and at least 120 mm (4.75 in.) after the head is positioned on the lifejacket for maximum freeboard and then relaxed;

(ii) The distance from water surface to the lower portion of the ear canal must be at least 50 mm (2 in.);

(iii) The torso angle (the angle between a vertical line and a line passing through the shoulder and hip) must be between 20° and 65° (back of vertical);

(iv) The face-plane angle (the angle between a vertical line and a line passing through the most forward part of the forehead and chin) must be between 15° and 60° (back of vertical);

(v) The lowest mark on a vertical scale 6 m (20 ft.) from and in front of the subject which the subject can see without moving the head must be no higher than 0.3 m (12 in.) from the water level.

(vi) The subject when looking to the side, must be able to see the water within 3 m (10 ft.) away; and

(vii) At least 75% of the retroreflective material on the outside of the lifejacket, and the PFD light, must be above the water.

(4) *Average requirements*. The test results for all subjects must be averaged for the following static measurements and must comply with the following:

(i) The average freeboard prior to positioning the head for maximum freeboard must be at least 120 mm (4.75 in.);

(ii) The average torso angle must be between 30° and 50° (back of vertical); and

(iii) The average face-plane angle must be between 20° and 50° (back of vertical).

(5) *"HELP" Position*. Starting in a relaxed, face-up position of static balance, each subject brings the legs and arms in towards the body so as to attain the "HELP" position (a fetal position, but holding the head back). The lifejacket must not turn the subject face down in the water.

(e) *Jump test*. (1) Each test subject dons an uninflated lifejacket and with hands above head, jumps feet first, into the water from a height of 4.5 m (15 ft.). No second stage donning is allowed during this test and the lifejacket must—

(i) Inflate automatically, float the subject to the surface, and stabilize the body with the mouth out of the water;

(ii) Maintain its intended position on the wearer;

(iii) Not be damaged; and

(iv) Not cause injury to the wearer.

(2) The jump test in paragraph (e)(1) of this section is repeated using a lifejacket which has been fully inflated manually.

(3) The jump test in paragraph (e)(2) of this section is then conducted with one chamber deflated. This test is then repeated as many times as necessary to test the lifejacket with a different chamber deflated until each chamber has been tested in this manner.

Note: Before conducting these tests at the 4.5 m height, subjects should first do the test from heights of 1 m and 3 m to lessen the possibility of injury. It is suggested that subjects wear a long-sleeve cotton shirt to prevent abrasions when testing the device in the inflated condition and that the teeth should be tightly clenched together when jumping.

(f) *Water emergence*—(1) *Equipment*. A pool with a wooden platform at one side must be used for this test. The platform must be 300 mm (12 in.) above the water surface and must not float on the water. The platform must have a smooth painted surface. Alternatively, a



Coast Guard approved inflatable liferaft may be used in lieu of a platform.

(2) *Qualifying.* Each test subject enters the water wearing only a bathing suit and swims 25 m. The subject must then be able to emerge from the pool onto the platform using only his or her hands on the top of the platform as an aid and without pushing off of the bottom of the pool. Any subject unable to emerge onto the platform within 30 seconds is disqualified for this test. If less than 2/3 of the test subjects qualify, substitute subjects must be used.

(3) *Test.* Each qualified subject dons an inflated lifejacket, enters the water and swims 25 m. Afterward, at least 2/3 of the qualified subjects must then be able to climb out of the pool in the manner prescribed in paragraph (f)(2) of this section within 45 seconds while wearing the lifejacket. If marking on the lifejacket so indicates, and if the wearer can read the marking while the lifejacket is being worn, the subjects may deflate the device during the 45 second attempt.

(g) *Lanyard pull test and strength.* (1) An uninflated lifejacket is placed on a rigid metal test form built according to Figure 160.176-13(n)(2) and suspended vertically.

(2) The inflation handle of each manual inflation mechanism is attached to a force indicator. The force indicator is then used to activate each manual inflation mechanism separately. The force required to activate each mechanism is recorded. In each test the force must be between 25 and 70 N (5 and 15 lb.).

(3) A weight of 225 N (50 lb.) is in turn attached to the inflation handle of each manual inflation mechanism. The weight is then allowed to hang freely for 5 minutes from each manual inflation mechanism. The handle must not separate from the mechanism.

(h) *Temperature cycling tests.* (1) Three uninflated lifejackets, 2 packed and 1 unpacked, are maintained at room temperature ( $20 \pm 3^\circ\text{C}$  ( $68 \pm 6^\circ\text{F}$ )) for 4 hours and then at a temperature of  $65 \pm 2^\circ\text{C}$  ( $150 \pm 5^\circ\text{F}$ ) for 20 hours. The lifejackets are then maintained at room temperature for at least 4 hours, after which they are maintained at a temperature of minus  $30 \pm 2^\circ\text{C}$  ( $-22 \pm 5^\circ\text{F}$ ) for 20 hours. This cycle is then repeated once.

(2) Upon the completion of the conditioning in paragraph (h)(1) of this section all sealed or non-reusable packaging is removed from the two packed units. The lifejackets must show no functional deterioration after being inflated immediately after removal from the conditioning. The lifejackets must be inflated as follows:

(i) One unit which was packed during conditioning must fully inflate within 2 minutes using only oral inflation.

(ii) The other unit which was packed during conditioning must fully inflate within 45 seconds of submersion in water at  $2 \pm 2^\circ\text{C}$  ( $37 \pm 5^\circ\text{F}$ ) as a result of automatic inflation.

(iii) The unit which was unpacked during conditioning must fully inflate within 30 seconds of activation of the manual inflation mechanisms.

(3) The same 3 lifejackets used for the test in paragraph (h)(1) of this section are deflated and, with 2 repacked and 1 unpacked, are maintained at room temperature for 4 hours and then at a temperature of minus  $30 \pm 2^\circ\text{C}$  ( $-22 \pm 5^\circ\text{F}$ ) for 20 hours. The lifejackets are then stored at room temperature for at least 4 hours, after which they are maintained at a temperature of  $65 \pm 2^\circ\text{C}$  ( $150 \pm 5^\circ\text{F}$ ) for 20 hours. This cycle is then repeated once. The steps in paragraph (h)(2) of this section are then repeated, and the lifejackets must meet the criteria in that paragraph.

(i) [Reserved]

(j) *Buoyancy and inflation medium retention test.* A lifejacket which has been used in the tests in paragraph (h) of this section must be used for this test.

(1) *Equipment.* The following equipment is required for this test:

(i) A wire mesh basket that is large enough to hold the inflated lifejacket without compressing it, is designed not to allow the lifejacket to float free, and is heavy enough to overcome the buoyancy of the lifejacket.

(ii) A scale that is sensitive to  $\pm 13$  g (0.5 oz.) and that has an error of less than  $\pm 13$  g (0.5 oz.).

(iii) A test tank, filled with fresh water, that is large enough to hold the basket with its top 50 mm (2 in.) below the surface without the basket touching the tank.

(2) *Method.* One inflation chamber is inflated using its automatic inflation mechanism. The lifejacket is placed in the basket. The basket is then suspended from the scale and submerged in the test tank with the lifejacket and basket completely below the water surface. An initial reading of the scale is taken after 30 minutes and again after 24 hours. The buoyancy of the lifejacket is the submerged weight of the basket minus the submerged weight of the basket with the lifejacket inside. This test is repeated as many times as necessary until each chamber has been tested. On each chamber that does not have an automatic inflation mechanism the manual or oral inflation mechanism may be used.

(3) *Requirement.* The buoyancy of each inflation chamber must be within

the tolerances specified in the plans and specifications for the lifejacket required by § 160.176-5(a)(2) of this Part. Each inflation chamber must retain at least 95% of its initial buoyancy after being submerged for 24 hours.

(k) *Uninflated floatation test.* A packed lifejacket, with all automatic inflation mechanisms disabled, is dropped from a height of 1 m (3 ft.) into fresh water. The lifejacket must remain floating on the surface of the water for at least 30 minutes. This test is repeated with an unpacked, uninflated lifejacket, with all automatic inflation mechanisms disabled.

(l) [Reserved]

(m) *Environmental tests.*—(1) *Salt spray exposure.* An uninflated lifejacket is subjected to 720 hours of salt spray as specified by ASTM B 117. The automatic inflation mechanism(s) must not be activated by the salt spray. The lifejacket is then inflated first using the automatic inflation mechanism(s) and then twice more using first the manual mechanisms and then the oral mechanisms. The lifejacket must show no functional deterioration.

(2) *Rain exposure.* An uninflated lifejacket is mounted on a rigid metal test form built according to Figure 160.176-13(n)(2). The test form must be vertical. Spray nozzles that deliver 0.05 mm of water per second (0.7 inch/hour) over the area of the lifejacket at a temperature between 2 and 16 °C (35 and 60 °F) and at a 45° angle below horizontal toward the lifejacket are mounted 1.5 m (4.5 ft.) above the base of the test form. There must be at least 4 nozzles evenly spaced around the lifejacket at a horizontal distance of 1 m from the center of the lifejacket and each nozzle must deliver water at the same rate. Water is then sprayed on the lifejacket for 1 hour. The lifejacket must not inflate during the test.

(n) *Tensile tests.* Two lifejackets that have been subjected to the tests in paragraph (h) of this section must be used for these tests.

(1) *Body tensile test.* (i) In this test one lifejacket must be fully inflated and the other deflated.

(ii) Two unconnected rigid cylinders are passed through the body portion of each lifejacket, or through the encircling body strap for yoke style devices, with one closure fastened and adjusted to its mid range, as shown in Figure 160.176-13(n)(1). Each cylinder must be 125 mm (5 inches) in diameter. The top cylinder is connected to a winch or pulley system. The bottom cylinder is connected to a test load which when combined with the weight of the lower cylinder and the linkage equals 325 kg



(720 lb.). The winch or pulley system lifts the top cylinder so the test load is raised off of its support. The test load is left suspended for 30 minutes.

(iii) There must be no functional deterioration of any component of either

lifejacket during the test. Each friction type closure must not permit slippage of more than 25 mm (1 in.).

(iv) If a lifejacket has friction type closures, the test must be repeated

immediately after the lifejacket has been immersed in water for a least 2 minutes.

(v) The test is repeated until each different type of closure is tested separately.

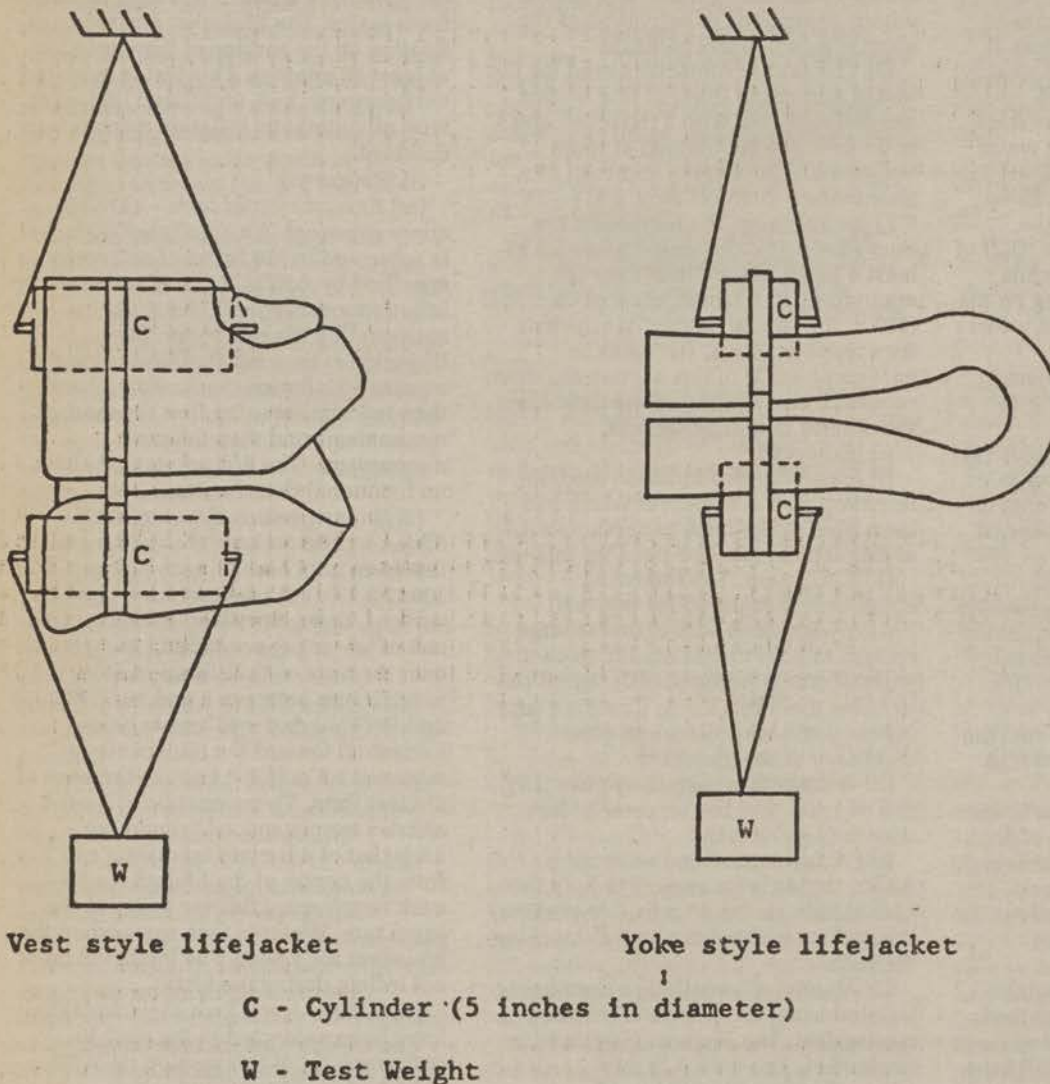


Figure 160.176-13(n)(1) Body Tensile Test Arrangement

(2) *Shoulder tensile test.* Each shoulder section of a lifejacket is subjected to this test separately. A fully inflated lifejacket, with all closures

fastened, must be secured to a rigid metal test form built according to Figure 160.176-13(n)(2). A  $2 \pm \frac{1}{4}$  in. wide web is passed through the shoulder section of

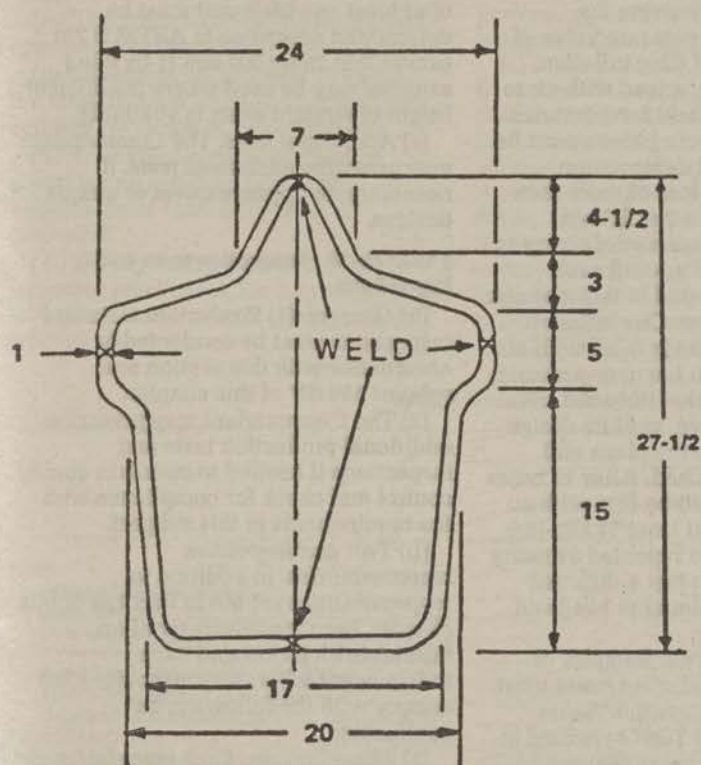
the lifejacket and is connected to a winch or pulley system. The bottom portion of the form is connected to a dead weight load which when combined



with the weight of the form and the linkage equals 90 kg. (200 lb.). The winch or pulley system is operated to raise the

weight off of its support. The weight is left suspended for 30 minutes. There must be no functional deterioration of

any component of the lifejacket during the test



Dimensions are in inches. Form fabricated from 1 inch diameter mild steel rod. All bend radii 1-1/2 inches

Figure 160.176-13(n)(2) Test Form

53

II

(3) *Strength of attachment of inflation mechanism.* (i) A fully inflated lifejacket is secured to a rigid metal test form as in Figure 160.176-13(n)(2), and the pressure of each inflated chamber is measured. The top portion of the form is then connected to a winch or pulley system. A 35 kg (75 lb.) weight is attached by a line to one of the inflation mechanisms as close as possible to the point of attachment on the lifejacket. The winch or pulley system is operated to raise the weight off of its support. The weight is left suspended for 5 minutes and then released. The inflation chamber to which the inflation mechanism is attached must not lose more than 3 kPa (0.4 psig) or 20% of its original pressure.

(ii) The test in paragraph (n)(3)(i) of this section is repeated until each type

of inflation mechanism has been tested separately.

(iii) The test is then repeated as many additional times as necessary to test each joint in each type of inflation mechanism beyond its point of attachment to an inflation chamber. In each test the point of attachment must be as close as possible to the joint being tested.

(o) [Reserved]

(p) *Impact test.* (1) an uninflated lifejacket is secured to the test form shown in Figure 160.176-13(n)(2). The lifejacket, with the automatic inflation mechanism disabled, is secured to the form as it is intended to be worn. The lifejacket is accelerated to 25 m/s (50 mph) horizontally and is then dropped from a height of not more than 0.5 m (1.5

ft.) into the water in the following positions:

- (i) Face down, shoulder forward.
- (ii) Face down, shoulder back.
- (iii) Back down, shoulder forward.
- (iv) Back down, shoulder back.
- (v) Left side down, shoulder forward.
- (vi) Right side down, shoulder back.

(2) Following each impact, there must be no sign of functional deterioration, and the lifejacket must not come off of the test form. After each impact the closures may be readjusted as necessary.

(3) Following the six impacts, the lifejacket must fully inflate using only its oral inflation mechanisms.

(4) The test in this paragraph is repeated on the same lifejacket after inflating, with manual inflation



mechanisms, all chambers that have those mechanism.

(q) *Flame exposure test.* A lifejacket that has been subjected to the tests in paragraph (h) of this section must be used for this test.

(1) *Equipment.* The following equipment is required for this test:

(i) A test pan 300 mm by 450 mm by 60 mm (12 in. by 18 in. by 2½ in.) containing 12 mm (½ in.) of water under 25 mm (1 in.) of N-heptane.

(ii) an arrangement to hold the lifejacket over the N-heptane.

(2) *Method.* The test is only conducted when there is no significant air movement other than that caused by the fire. The N-heptane is ignited and allowed to burn for 30 seconds. A lifejacket which has been fully inflated with air is then passed through the flames in an upright, forward, vertical, free-hanging position with the bottom of the lifejacket 240 mm C 9½ in.) above the top edge of the test pan. The lifejacket is exposed to the flames for 2 seconds.

(3) *Requirement.* The lifejacket must not burn or melt for more than 6 seconds after being removed from the flames. The lifejacket must remain inflated throughout the test. If the lifejacket sustains any visible damage other than discoloration after being exposed to the flames, the lifejacket must—

(i) pass the test in paragraph (e)(2) of this section, except that only one subject is used and the test is done six times; and

(ii) pass the tensile test in paragraph (n)(1) of this section, except that a weight of 245 kg (540 lb.) is used in lieu of the 325 kg (720 lb.) weight.

(r) *Solvent exposure test.* Lifejackets with their automatic inflation mechanisms disabled must be used for this test. Two uninflated lifejackets that have been subjected to the tests in paragraph (h) of this section are totally submerged in diesel fuel, grade No. 2-D as defined in ASTM D 975, for 24 hours. The lifejackets are then removed and the excess fuel removed. One lifejacket must fully inflate using only its manual inflation mechanisms and the other using only its oral inflation mechanisms. The lifejackets must show no functional deterioration as a result of the test.

(s) *Puncture test.* A fully inflated lifejacket is placed on a flat, level surface. A test point 4 mm (⅝ in.) in diameter tapering to a rounded point, 1 mm (¼ in.) in diameter, is pressed against an inflation chamber of the lifejacket perpendicular to the surface of the chamber at a rate of 300 mm/minute (12 in./minute). The test point is applied until the inflation chamber is punctured or the chamber walls are touching each

other. The force required to puncture the inflation chamber or make the chamber walls touch each other is recorded. The force required must exceed 30 N (7 lb.).

(t) *Inflation chamber tests—(1) Over-pressure test.* One lifejacket is used in this test. Before pressurizing the lifejacket, each over-pressure valve, if any, must be blocked. One inflation chamber is then pressurized with air to 70 kPa (10 psig) and held for 5 minutes. After the 5 minute period, there must be no sign of permanent deformation, damage, or pressure loss of more than 3.5 kPa (0.5 psig). This test is then repeated as many times as necessary to test a different chamber until each chamber has been tested in this manner.

(2) *Air retention test.* One inflation chamber of a lifejacket is filled with air until air escapes from the over-pressure valve or, if the lifejacket does not have an over-pressure valve, until its design pressure, as stated in the plans and specifications, is reached. After 12 hours the lifejacket must still be firm with an internal pressure of at least 14 kPa (2.0 psig). This test is then repeated as many times as necessary to test a different chamber until each chamber has been tested in this manner.

(u) *Seam strength test.* Samples of each type of structural sewn seam must be subjected to and pass the "Seam Strength (Sewability) Test" specified in Underwriters Laboratories Standard UL 1191 except that the breaking strength of each seam in the directions of both greater and lesser thread count must be at least 400 N (90 lb.).

(v) [Reserved]

(w) *Visual examination.* One complete lifejacket must be visually examined for compliance with the requirements of §§ 160.176-9 and 160.176-11 of this Part

(x) [Reserved]

(y) *Inflation chamber properties.* The tests in this paragraph must be run after successful completion of all other approval tests. The results of these tests will be used to check the quality of incoming lifejacket components and the production process. Test samples must come from one or more lifejackets that were each used in all of the tests in paragraphs (e), (j), (p), (s), and (t) of this section.

(1) *Grab breaking strength.* The grab breaking strength of chamber materials must be determined according to Method No. 5100 of Federal Test Method Standard 191A or ASTM D 751.

(2) *Tear strength.* The tear strength of chamber materials must be determined according to Method No. 5132 or 5134 of Federal Test Method Standard 191A or ASTM D 751.

(3) *Permeability.* The permeability of chamber materials must be determined according to ASTM D 1434 using CO<sub>2</sub> as the test gas.

(4) *Seam strength.* The seam strength of the seams in each inflation chamber of at least one lifejacket must be determined according to ASTM D 751 except that 25 by 200 mm (1 by 8 in.) samples may be used where insufficient length of straight seam is available.

(z) *Additional tests.* The Commandant may prescribe additional tests, if necessary, to approve novel or unique designs.

#### § 160.176-15 Production tests and inspections.

(a) *General.* (1) Production tests and inspections must be conducted in accordance with this section and subpart 159.007 of this chapter.

(2) The Commandant may prescribe additional production tests and inspections if needed to maintain quality control and check for compliance with the requirements in this subpart.

(b) *Test and inspection responsibilities.* In addition to responsibilities set out in Part 159 of this chapter, each manufacturer of an inflatable lifejacket and each independent laboratory inspector must comply with the following, as applicable:

(1) *Manufacturer.* Each manufacturer must—

(i) Perform all required tests and examinations on each lifejacket lot before the independent laboratory inspector tests and inspects the lot;

(ii) Perform required testing of each incoming lot of inflation chamber material before using that lot in production;

(iii) Have procedures for maintaining quality control of the materials used, manufacturing operations, and the finished product;

(iv) Have a continuing program of employee training and a program for maintaining production and test equipment;

(v) Have an inspector from the independent laboratory observe the production methods used in producing the first lifejacket lot produced and observe any revisions made thereafter in production methods;

(vi) Admit the inspector and any Coast Guard representative to any place in the factory where work is done on lifejackets or component materials, and where completed lifejackets are stored; and

(vii) Allow the inspector and any Coast Guard representative to take samples of completed lifejackets or of



components materials for tests prescribed in this subpart.

(2) *Independent laboratory.* (i) An inspector may not perform or supervise any production test or inspection unless—

(A) The manufacturer has a current approval certificate; and

(B) The inspector has first observed the manufacturer's production methods and any revisions to those methods.

(ii) An inspector must perform or supervise all required tests and inspections of each lifejacket lot produced.

(iii) During each inspection, the inspector must check for noncompliance with the manufacturer's quality control procedures.

(iv) At least once each calendar quarter, the inspector must, as a check on manufacturer compliance with this section, examine the manufacturer's records required by § 160.176-17 of this Part and observe the manufacturer in performing each of the tests required by paragraph (h) of this section.

(c) *Lifejacket lots.* A lot number must be assigned to each group of lifejackets produced. No lot may exceed 1000 lifejackets. A new lot must be started whenever any change in materials or a revision to a production method is made, and whenever any substantial discontinuity in the production process occurs. Changes in lots of component materials must be treated as changes in materials. Lots must be numbered serially. The lot number assigned, along

with the approval number, must enable the lifejacket manufacturer, by referring to the records required by this subpart, to determine who produced the components used in the lifejacket.

(d) *Samples.* (1) Samples used in testing and inspections must be selected at random. Sampling must be done only when all lifejackets or materials in the lot are available for selection.

(2) Each sample lifejacket selected must be complete, unless otherwise specified in paragraph (h) of this section.

(3) The inspector may not select the same samples tested by the manufacturer.

(4) The number of samples selected per lot must be at least the applicable number listed in Table 160.176-15A or Table 160.176-15B.

TABLE 160.176-15A.—MANUFACTURER'S SAMPLING PLAN

	Number of Samples Per Lot					
	Lot Size					
	1-100	101-200	201-300	301-500	501-750	751-1000
Tests:						
Inflation Chamber Materials.....			SEE NOTE (1)			
Seam Strength.....	1	1	2	2	3	4
Over-pressure <sup>1</sup> 3.....	1	2	3	4	6	8
Air Retention.....			EVERY DEVICE IN THE LOT			
Buoyancy & Inflation Media Retention.....	1	2	3	4	6	8
Tensile Strength <sup>2</sup> .....	1	1	1	1	1	1
Detailed Product Examination.....	2	2	3	4	6	8
Retest Sample Size <sup>3</sup> .....	—	—	13	13	20	20
Final Lot Inspection:.....			EVERY DEVICE IN THE LOT			

<sup>1</sup> Samples must be selected from each lot of incoming material. The tests referenced in §§ 160.176-13(y)(1) through 160.176-13(y)(4) of this Part prescribe the number of samples to select.

<sup>2</sup> Samples selected for this test may not be the same samples selected for other tests.

<sup>3</sup> If any sample fails the over-pressure test, the number of samples to be tested in the next lot produced must be at least 2% of the total number of lifejackets in the lot or 10 lifejackets, whichever is greater.

<sup>4</sup> This test is required only when a new lot of materials is used and when a revised production process is used. However, the test must be run at least once every calendar quarter regardless of whether a new lot of materials or a revised process is started in that quarter.

TABLE 160.176-15B.—INSPECTOR'S SAMPLING PLAN

	Number of samples per lot					
	Lot size					
	1-100	101-200	201-300	301-500	501-750	751-1000
Tests:						
Over-pressure <sup>1</sup> .....	1	2	3	4	6	8
Air Retention.....	1	2	3	4	6	8
Buoyancy & Inflation Media Retention.....	1	2	3	4	6	8
Tensile Strength <sup>2</sup> .....	1	1	1	1	1	1
Waterproof marking.....			SEE NOTE (3) FOR SAMPLING			
Detailed Product Examination.....	2	2	2	3	3	3
Retest Sample Size <sup>3</sup> .....	10	10	13	13	20	20
Final Lot Inspection:.....	20	32	50	60	70	80

<sup>1</sup> Samples selected for this test may not be the same lifejackets selected for other tests.

<sup>2</sup> This test may be omitted if the manufacturer has previously conducted it on the lot and the inspector has conducted the test on a previous lot during the same calendar quarter.

<sup>3</sup> One sample of each means of marking on each type of fabric or finish used in lifejacket construction must be tested. This test is only required when a new lot of materials is used. However, the test must be run at least once every calendar quarter regardless of whether a new lot of materials is started in that quarter.

(e) *Accept/reject criteria:*

*manufacturer testing.* (1) A lifejacket lot passes production testing if each sample passes each test.

(2) In lots of 200 or fewer lifejackets, the lot must be rejected if any sample fails one or more tests.

(3) In lots of more than 200 lifejackets, the lot must be rejected if—

(i) One sample fails more than one test;

(ii) More than one sample fails any test or combination of tests; or



(iii) One sample fails one test and in redoing that test with the number of samples specified for retesting in Table 160.176-15A, one or more samples fail the test.

(4) A rejected lifejacket lot may be retested only if allowed under paragraph (k) of this section.

(5) In testing inflation chamber materials, a lot is accepted only if the average of the results of testing the minimum number of samples prescribed in the reference tests in § 160.176-13(y) of this Part is within the tolerances specified in § 160.176-8(c)(1) of this Part. A rejected lot may not be used in production.

(f) *Accept/reject criteria: independent laboratory testing.* (1) A lot passes production testing if each sample passes each test.

(2) A lot must be rejected if—

(i) One sample fails more than one test;

(ii) More than one sample fails any test or combination of tests; or

(iii) One sample fails one test and in redoing that test with the number of samples specified for retesting in Table 160.176-15B, one or more samples fail the test.

(3) A rejected lot may be retested only if allowed under paragraph (k) of this section.

(g) *Facilities and equipment—(1) General.* The manufacturer must provide the test equipment and facilities described in this section for performing production tests, examinations, and inspections.

(2) *Calibration.* The manufacturer must have the calibration of all test equipment checked at least every six months by a weights and measures agency or the equipment manufacturer, distributor, or dealer.

(3) *Equipment.* The following equipment is required:

(i) *A sample basket* for buoyancy tests. It must be made of wire mesh and be of sufficient size and durability to securely hold a completely inflated lifejacket under water without compressing it. The basket must be heavy enough or be sufficiently weighted to submerge when holding an inflated test sample.

(ii) *A tank filled with fresh water* for buoyancy tests. The height of the tank must be sufficient to allow a water depth of 5 cm (2 inches) minimum between the top of the basket and water surface when the basket is not touching the bottom. The length and width of the tank must be sufficient to prevent each submerged basket from contacting another basket or the tank sides and bottom. Means for locking or sealing the tank must be provided to prevent

disturbance of any samples or a change in water level during testing.

(iii) *A scale* that has sufficient capacity to weigh a submerged basket for buoyancy tests. The scale must be sensitive to 13 g (0.5 oz.) and must not have an error exceeding  $\pm 13$  g (0.5 oz.).

(iv) *Tensile test equipment* that is suitable for applying pulling force in conducting body strap assembly strength subtests. The equipment assembly may be (A) a known weight and winch, (B) a scale, winch, and fixed anchor, or (C) a tensile test machine that is capable of holding a given tension. The assembly must provide accuracy to maintain a pulling force within  $\pm 2$  percent of specified force. Additionally, if the closed loop test method in § 160.176-13(h)(1) of this Part is used, two cylinders of the type described in that method must be provided.

(v) *A thermometer* that is sensitive to  $0.5^\circ\text{C}$  ( $1^\circ\text{F}$ ) and does not have an error exceeding  $\pm 0.25^\circ\text{C}$  ( $0.5^\circ\text{F}$ ).

(vi) *A barometer* that is capable of reading mm (inches) of mercury with a sensitivity of 1 mm (0.05 in.) Hg and an error not exceeding  $\pm 5$  mm (0.02 in.) Hg.

(vii) *A regulated air supply* that is capable of supplying the air necessary to conduct the tests specified in paragraphs (h)(4) and (h)(5) of this section.

(viii) *A pressure gauge* that is capable of measuring air pressure with a sensitivity of 1 kPa (0.1 psig) and an error not exceeding  $\pm 0.5$  kPa (0.05 psig).

(ix) *A torque wrench* if any screw fasteners are used. The wrench must be sensitive to, and have an error of less than, one half the specified tolerance for the torque values of the fasteners.

(4) *Facilities:* The manufacturer must provide a suitable place and the necessary apparatus for the inspector to use in conducting or supervising tests. For the final lot inspection, the manufacturer must provide a suitable working environment and a smooth-top table for the inspector's use.

(h) *Production tests and examinations.—(1) General.* (i) Samples used in testing must be selected according to paragraph (d) of this section.

(ii) On each sample selected—

(A) The manufacturer must conduct the tests in paragraphs (h)(2) through (h)(8) of this section; and

(B) The independent laboratory inspector must conduct or supervise the tests in paragraphs (h)(4) through (h)(9) of this section.

(iii) Each individual test result must, in addition to meeting the requirements in this paragraph, meet the requirements, if any, set out in the

approved plans and specifications required by § 160.176-5(a)(2) of this Part.

(2) *Inflation chamber materials.* Each sample must be tested according to §§ 160.176-13(y)(1) through 160.176-13(y)(3) of this Part. The average and individual results of testing the minimum number of samples prescribed by § 160.176-13(y) of this Part must comply with the requirements in § 160.176-8(c)(1) of this Part.

(3) *Seam strength.* The seams in each inflation chamber of each sample must be tested according to § 160.176-13(y)(4) of this Part. The results for each inflation chamber must be at least 90% of the results obtained in approval testing.

(4) *Over-pressure.* Each sample must be tested according to and meet § 160.176-13(t)(1) of this Part.

(5) *Air retention.* Each sample must be tested according to and meet § 160.176-13(t)(2) of this Part.

(6) *Buoyancy and inflation medium retention.* Each sample must be tested according to and meet § 160.176-13(j) of this part. Each buoyancy value must fall within the tolerances specified in the approved plans and specifications.

(7) *Tensile strength.* Each sample must be tested according to and meet § 160.176-13(n) of this Part.

(8) *Detailed product examination.* Each sample lifejacket must be disassembled to the extent necessary to determine compliance with the following:

(i) All dimensions and seam allowances must be within tolerances prescribed in the approved plans and specifications required by § 160.176-5(a)(2) of this part.

(ii) The torque of each screw type mechanical fastener must be within its tolerance as prescribed in the approved plans and specifications.

(iii) The arrangement, markings, and workmanship must be as specified in the approved plans and specifications and this subpart.

(iv) The lifejacket must not otherwise be defective.

(9) *Waterproof marking test.* Each sample is completely submerged in fresh water for a minimum of 30 minutes, and then removed and immediately placed on a hard surface. The markings are vigorously rubbed with the fingers for 15 seconds. If the printing becomes illegible, the sample is rejected.

(i) [Reserved]

(j) *Final lot examination and inspection.—(1) General.* On each lifejacket lot that passes production testing, the manufacturer must perform a final lot examination and an independent laboratory inspector must



perform a final lot inspection. Samples must be selected according to paragraph (d) of this section. Each final lot examination and inspection must show—

- (i) First quality workmanship;
- (ii) That the general arrangement and attachment of all components such as body straps, closures, inflation mechanisms, tie tapes, drawstrings, etc. are as specified in the approved plans and specifications; and
- (iii) Compliance with the marking requirements in § 160.176-23 of this Part.

(2) *Accept/reject criteria.* Each nonconforming lifejacket must be rejected. If three or more nonconforming lifejackets are rejected for the same kind of defect, lot examination or inspection must be discontinued and the lot rejected.

(3) *Manufacturer examination.* This examination must be done by a manufacturer's representative who is familiar with the approved plans and specifications required by § 160.176-5(a)(2) of this Part, the functioning of the lifejacket and its components, and the production testing procedures. This person must not be responsible for meeting production schedules or be supervised by someone who is. This person must prepare and sign the record required by § 159.007-13(a) of this chapter and § 160.176-17(b) of this part.

(4) *Independent laboratory inspection.* (i) The inspector must discontinue lot inspection and reject the lot if observation of the records for the lot or of individual lifejackets shows noncompliance with this section or the manufacturer's quality control procedures.

(ii) An inspector may not perform a final lot inspection unless the manufacturer has a current approval certificate.

(iii) If the inspector rejects a lot, the Commandant must be advised immediately.

(iv) The inspector must prepare and sign the inspection record required by § 159.007-13(a) of this chapter and § 160.176-17(b) of this Part. If the lot passes, the record must also include the inspector's certification to that effect and a certification that no evidence of noncompliance with this section was observed.

(v) If the lot passes, each lifejacket in the lot must be plainly marked with the words, "Inspected and Passed, (Date), (Inspection Laboratory ID)." This marking must be done in the presence of the inspector. The marking must be permanent and waterproof. The stamp which contains the marking must be kept in the independent laboratory's custody at all times.

(k) *Disposition of rejected lifejacket lot or lifejacket.* (1) A rejected lifejacket lot may be resubmitted for testing, examination or inspection if the manufacturer first removes and destroys each defective lifejacket or, if authorized by the Commandant, reworks the lot to correct the defect.

(2) Any lifejacket rejected in a final lot examination or inspection may be resubmitted for examination or inspection if all defects have been corrected and reexamination or reinspection is authorized by the Commandant.

(3) A rejected lot or rejected lifejacket may not be sold or offered for sale under representation that it meets this subpart or that it is Coast Guard approved.

#### § 160.176-17 Manufacturer records.

(a) Each manufacturer of inflatable lifejackets must keep the records required by § 159.007-13 of this chapter except that they must be retained for at least 120 months after the month in which the inspection or test was conducted.

(b) Each record required by § 159.007-13 of this chapter must also include the following information:

(1) For each test, the serial number of the test instrument used if there is more than one available.

(2) For each test and inspection, the identification of the samples used, the lot number, the approval number, and the number of lifejackets in the lot.

(3) For each lot rejected, the cause for rejection, any corrective action taken, and the final disposition of the lot.

(c) The description or photographs of procedures and apparatus used in testing is not required for the records prescribed in § 159.007-13 of this chapter as long as the manufacturer's procedures and apparatus meet the requirements of this subpart.

(d) Each manufacturer of inflatable lifejackets must also keep the following records:

(1) Records for all materials used in production including the following:

- (i) Name and address of the supplier.
- (ii) Date of purchase and receipt.
- (iii) Lot number.

(iv) Certification meeting § 160.176-8(a)(3) of this part.

(2) A copy of this subpart.

(3) Each document incorporated by reference in § 160.176-4 of this Part.

(4) A copy of the approved plans and specifications required by § 160.176-5(a)(2) of this part.

(5) The approval certificate.

(6) Calibration of test equipment, including the identity of the agency performing the calibration, date of calibration, and results.

(7) A listing of current and formerly approved servicing facilities.

(e) The records required by paragraph (d)(1) of this section must be kept for at least 120 months after preparation. All other records required by paragraph (d) of this section must be kept for at least 60 months after the lifejacket approval expires or is terminated.

#### § 160.176-19 Servicing.

(a) *General.* This section contains requirements for servicing facilities, manuals, training, guidelines, and records. Other regulations in this chapter require inflatable lifejackets to be serviced at approved facilities at 12 month intervals.

(1) Each manufacturer of an approved inflatable lifejacket must provide one or more Coast Guard approved facilities for servicing those lifejackets. The manufacturer must notify the Commandant whenever an approved facility under its organization no longer provides servicing of a lifejacket make and model listed in the guidelines required by paragraph (d) of this section.

(2) Each manufacturer of an approved inflatable lifejacket must make replacement parts available to Coast Guard approved independent servicing facilities.

(b) *Servicing facilities.* Each Coast Guard approved servicing facility must meet the requirements of this paragraph and paragraph (d) of this section in order to receive and keep its approval for each make and model of lifejacket. Approval is obtained according to § 160.176-5(c) of this Part.

(1) Each servicing facility must conduct lifejacket servicing according to its servicing guidelines and follow the procedures in the service manual required by this section.

(2) Each servicing facility must have a suitable site for servicing which must be clean, well lit, free from excessive dust, drafts, and strong sunlight, and have appropriate temperature and humidity control as specified in the service manual.

(3) Each servicing facility must have the appropriate service, repair, and test equipment and spare parts for performing required tests and repairs.

(4) Each servicing facility must have a current manufacturer's service manual for each make and model of lifejacket serviced.

(5) A servicing facility may have more than one servicing site provided that each site meets the requirements of paragraph (b)(2) of this section.

(6) Each servicing facility must be inspected at intervals not exceeding six



months by an accepted independent laboratory, and a report of the inspections must be submitted to the Commandant at least annually. The report must contain enough information to show compliance with paragraphs (b) (1) through (4) of this section and paragraph (d) of this section. Where a facility uses more than one site the report must show compliance at each site at least biennially.

(c) *Service manual.* (1) Each manufacturer of an approved inflatable lifejacket must prepare a service manual for the lifejacket. The service manual must be approved by the Commandant according to § 160.176-5(b) of this part.

(2) The manufacturer must make the service manual, service manual revisions, and service bulletins available to each approved servicing facility.

(3) Each service manual must contain the following:

(i) Detailed procedures for inspecting, servicing, and repackaging the lifejacket.

(ii) A list of approved replacement parts and materials to be used for servicing and repairs, if any.

(iii) A requirement to mark the date and servicing facility name on each lifejacket serviced.

(iv) Frequency of servicing.

(v) Any specific restrictions or special procedures prescribed by the Coast Guard or manufacturer.

(4) Each service manual revision and service bulletin which authorizes the modification of a lifejacket, or which affects a requirement under this subpart, must be approved by the Commandant. Other revisions and service bulletins are not required to be approved, but a copy of each must be sent to the Commandant when it is issued. At least once each year, the manufacturer must provide to the Commandant and to each servicing facility approved to service its lifejackets a bulletin listing each service manual revision and bulletin in effect.

(d) *Servicing facilities guidelines.* Each servicing facility must have written guidelines that include the following:

(1) Identification of each make and model of lifejacket which may be serviced by the facility as well as the manual and revision to be used for servicing.

(2) Identification of the person, by title or position, who is responsible for the servicing program.

(3) Training and qualifications of servicing technicians.

(4) Provisions for the facility to retain a copy of its current letter of approval from the Coast Guard at each site.

(5) Requirements to—

(i) Ensure each inflatable lifejacket serviced under its Coast Guard approval

is serviced in accordance with the manufacturer's service manual;

(ii) Keep servicing technicians informed of each approved servicing manual revision and bulletin and ensure servicing technicians understand each change and new technique related to the lifejackets serviced by the facility;

(iii) Calibrate each pressure gauge, weighing scale, and mechanically-operated barometer at intervals of not more than one year;

(iv) Ensure each inflatable lifejacket serviced under the facility's Coast Guard approval is serviced by or under the supervision of a servicing technician who meets the requirements of item (3) of this paragraph;

(v) Specify each make and model of lifejacket it is approved to service when it represents itself as approved by the U.S. Coast Guard; and

(vi) Not service any lifejacket for a U.S. registered commercial vessel, unless it is approved by the U.S. Coast Guard to service the make and model of lifejacket.

(e) *Servicing records.* Each servicing facility must maintain records of all completed servicing. These records must be retained for at least 5 years after they are made, be made available to any Coast Guard representative and independent laboratory inspector upon request, and include at least the following:

(1) Date of servicing, number of lifejackets serviced, lot identification, approval number, and test results data for the lifejackets serviced.

(2) Identification of the person conducting the servicing.

(3) Identity of the vessel receiving the serviced lifejackets.

(4) Date of return to the vessel.

#### § 160.176-21 User manuals.

(a) The manufacturer must develop a user's manual for each model of inflatable lifejacket. The content of the manual must be provided for approval according to §§ 160.176-5(a)(3)(v) and 160.176-5(b) of this Part.

(b) A user's manual must be provided with each lifejacket except that only five manuals need be provided to a single user vessel if more than five lifejackets are carried on board.

(c) Each user's manual must contain in detail the following:

(1) Instructions on use of the lifejacket and replacement of expendable parts.

(2) Procedures for examining serviceability of lifejackets and the frequency of examination.

(3) Pages for logging on board examinations.

(4) Frequency of required servicing at approved servicing facilities.

(5) Instructions, if any, on proper stowage.

(6) Procedures for getting the lifejackets repaired by a servicing facility or the manufacturer.

(7) Procedures for making emergency repairs on board.

(8) Any specific restrictions or special instructions.

#### § 160.176-23 Marking.

(a) *General.* Each inflatable lifejacket must be marked with the information required by this section. Each marking must be waterproof, clear, and permanent. Except as provided elsewhere in this subpart, each marking must be readable from a distance of three feet.

(b) *Prominence.* Each marking required in paragraph (d) of this section, except vital care and use instructions, if any, must be less prominent and in smaller print than markings required in paragraph (c) of this section. Each optional marking must be significantly less prominent and smaller than required markings. The marking "ADULT" must be in at least 18 mm (¾ inch) high bold capital lettering. If a lifejacket is stored in a package, the package must also have the marking "ADULT" or this marking must be easily visible through the package.

(c) *Text.* Each inflatable lifejacket must be marked with the following text in the exact order shown:

ADULT—For a person weighing more than 90 pounds.

Type V PFD—Approved for use on (see paragraph (e) of this section for exact text to be used here) in lieu of (see paragraph (f) of this section for exact text to be used here).

This lifejacket must be serviced, stowed, and used in accordance with (insert description of service manual and user's manual).

When fully inflated this lifejacket provides a minimum buoyant force of (insert the design buoyancy in lb.).

(d) *Other Information.* Each lifejacket must also be marked with the following information below the text required by paragraph (c) of this section:

(1) U.S. Coast Guard Approval No. (insert assigned approval number).

(2) Manufacturer's or private labeler's name and address.

(3) Lot Number.

(4) Date, or year and calendar quarter, of manufacture.

(5) Necessary vital care or use instructions, if any, such as the following:

(i) Warning against dry cleaning.

(ii) Size and type of inflation medium cartridges required.

(iii) Specific donning instructions.



(3) *Approved applications.* The text to be inserted in paragraph (c) of this section as the approved use will be one or more of the following as identified by the Commandant on the approval certificate issued according to § 159.005-13(a)(2) of this chapter:

- (1) The name of the vessel.
- (2) The type of vessel.
- (3) Specific purpose or limitation approved by the Coast Guard.

(f) *Type equivalence.* The exact text to be inserted in paragraph (c) of this section as the approved performance type will be one of the following as identified by the Commandant on the approval certificate:

- (1) Type I PFD.
- (2) Type V PFD—(insert exact text of additional description noted on the approval certificate).

Dated: October 23, 1989.

J.D. Sipes,

Rear Admiral, U.S. Coast Guard, Chief, Office of Marine Safety, Security and Environmental Protection.

[FR Doc. 89-28752 Filed 12-4-89; 8:45 am]

BILLING CODE 4510-14-M